


2004  
Summer

# WHERE ARE YOU HEADED THIS SUMMER?

SPEND PART OF YOUR  
VACATION WITH US!  
PURSUE A DEGREE OR  
CERTIFICATE PROGRAM



 SEE OUR ACCELERATED SUMMER SCHEDULE INSIDE.

Summer Session I: May 24 – June 30

Summer Session II: July 12 – August 19

**UNDERGRADUATE & GRADUATE CLASSES BEGIN MAY 24, 2004**

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Registration Information

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Design: Tepperman/Ray Associates • Printed by Charles River Publishing

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Continuing Studies and Corporate Education  
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Lowell, MA 01854-2881  
(978) 934-2480

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UMass Lowell



# MAKE UMASS LOWELL

## your summer destination!

This summer you can sign up for a journey to move your career forward. If you take a course at UMass Lowell this summer, you can accelerate your progress towards completing your degree or certificate program.

Whether you're a full-time undergraduate student looking to lighten your load in the Fall or a working professional looking to advance your career part-time in the evening, UMass Lowell has the perfect mix of courses, certificates, and degrees.

With UMass Lowell's flexible scheduling options, you can choose between 6 week intensive classes or 13 week classes.

Too busy to come to class? Take a course online. UMass Lowell's undergraduate and graduate programs can accelerate your progress.

Need help deciding what to take? Get speedy advice from our friendly counselors. Explore your fastest options for earning college credit, professional certificates, or specialized degrees.

Need to keep abreast of major developments in your field? Take advantage of our unlimited course selection to remain competitive in the marketplace.

To find out just how easy it is to complete your degree or certificate, call our Advising Center at (978) 934-2474 or join us at our Open House on Tuesday, May 11th!

*Check out our new Corporate Signature Seminar Series. (See page 6.)*

**Continuing Education Open House** Please join us for the Continuing Studies and Corporate Education Summer Session  
Open House and General Registration on **Tuesday, May 11, 2004, from 5:00 to 7:30 p.m.** in Southwick Hall 223.



### EARLY BIRD ADVISING

April 19, 2004 through May 7, 2004

Call the Advising Center at (978) 934-2474 to set up an appointment with a General Counselor to review your program worksheets and plan for the upcoming semester.

**Remember, the Summer term begins May 24, 2004.** For a complete list of courses, visit <http://continuinged.uml.edu> or contact us at (978) 934-2474 for more information.

#### EARLY BIRD INFORMATION SESSIONS

Continuing Studies Advisors will hold Early Bird Information Sessions for those who would like to learn more about our programs and financial aid. All current students and prospective students are invited to participate. These presentations will be followed by an informal question and answer period.

- Monday, May 3, 2004 at 1:00 pm
- Thursday, May 6, 2004 at 5:30 pm

**Call the Advising Center today at (978) 934-2474 to reserve your space.**

### Open House & General Registration

**Tuesday, May 11, 2004**

5:00-7:30 pm  
Southwick Hall, UML North

Find out about:

- Evening Certificate Programs & Degrees
- Financial Aid • Online Courses

Academic Advisors will be available at UML North.\* For further information, call (978) 934-2480.

\*Please note: Transfer credits will not be evaluated during the Open House. Students should plan on making individual appointments with an Academic Advisor prior to the Open House.



### New Student Orientation

Are you a new student to Continuing Studies and Corporate Education? Do you have questions about registration, tuition, financial aid, applying to a degree or certificate program, etc.?

**THEN JOIN US FOR OUR NEW STUDENT ORIENTATION NIGHT!**

Find out how easy it is to get answers to questions such as:

- How do I select a course and check for prerequisites?
- How do I register?
- Am I able to enroll in a degree or certificate program?
- When do I pay for my courses?
- Where is my classroom located?
- How do I take a course online?
- How do I use the electronic library?

Call the Advising Center today at (978) 934-2474 to reserve your seat!

### FREE ONLINE Orientation!

Come see how **easy** it is to take a course **online!**

Want to learn more about taking courses over the Internet? Are you planning on registering for an online course this semester? This orientation will introduce you to the features of your online course and answer any questions you may have.

Join us at the session that best fits your schedule:

#### Session I:

Tuesday, May 11, 5:30-6:15 pm

#### Session II:

Tuesday, May 11, 6:30-7:15 pm

Call (978) 934-2474 to reserve your seat in one of these sessions!





# Certificate Programs

Take advantage of your company's tuition reimbursement policy to move your career forward!



## Free software

### ASK ABOUT OUR FREE MICROSOFT® DEVELOPER SOFTWARE FOR IT COURSES!

UMass Lowell has recently joined the Microsoft Developers Network Academic Alliance (MSDNAA). The MSDNAA provides a complete, inexpensive solution to keep UMass Lowell's academic labs, faculty and students on the leading edge of technology.

This program allows UMass Lowell to provide the software to students taking certain credit courses so they can load the software on their personal computers for use in coursework and personal projects. The software includes the latest set of Microsoft platforms, servers, and developer tools currently available including Visual Studio .NET 2003 Professional and Windows XP Professional.

Refer to the courses with the icon designating all applicable courses.

FOR A COMPLETE LIST OF ALL APPLICABLE COURSES AND OTHER INFORMATION, PLEASE VISIT <http://continuinged.uml.edu/msdnAA.htm>

## Information TECHNOLOGY



### Fundamentals of Information Technology

The need for professionals with a strong information technology background will continue to increase as business, government, schools, and other organizations seek new applications for computers and networks in the workplace. This certificate is designed as an introductory program for those who want to explore a broad range of electives in different subject areas before deciding on an area of specialization. This program can be used as a gateway to the other, more specialized certificate programs. You can earn the Certificate in Fundamentals of Information Technology entirely online, on campus, or by taking a combination of online and on campus courses. For more details, please see our Continuing Education website at <http://continuinged.uml.edu>.

#### Required Courses:

- 90.160 Introduction to Information Systems
- 90.202 Introduction to Personal Computing and Microsoft Office\*

#### Electives (Choose 4):\*\*

##### Programming Electives:

- 90.211 Introduction to Programming with C, Part I
- 90.212 Introduction to Programming with C, Part II
- 90.220 Visual Basic
- 90.267 C Programming
- 90.268 C++ Programming
- 90.269 Advanced C++
- 90.270 Visual C++
- 90.271 C# (C Sharp)
- 90.364 Problem Solving with C

##### Database Electives:

- 90.171 Applications Software: Access
- 90.342 Web-Enabled Database Development
- 90.474 Relational Database Concepts

##### Multimedia/Web Electives:

- 90.230 Introduction to Multimedia
- 91.113 Exploring the Internet

##### Additional Electives:

- 90.311 Introduction to the UNIX Operating System
- 90.312 UNIX Shell Programming
- 90.461 LAN/WAN Technologies

\*Students with spreadsheet and database experience on Macs or PCs can replace 90.202 with any of the elective courses listed above.

\*\*Note: This is a partial list of computer elective courses. For the complete list of courses that may be applied as electives, see the Continuing Education Course Catalog for computer courses with the 90. or 92. prefix.



### Client/Server Database Design and Administration

Economic indicators, business surveys, and professional IT recruitment agencies show a major shortage of skilled IT professionals in Database Design and Administration. With every aspect of today's businesses being moved to E-Commerce to service the vast global economy, professionals skilled in database technology are in critical demand. This certificate is designed to provide a strong background in all areas of database and data-related skills: operating system platforms, database design, development, and administration. Utilizing state-of-the-art labs, hands-on skill building and projects are emphasized.

#### Required Courses:

Note: Students with experience equivalent to any of the required courses may substitute up to two electives for the required courses, with prior approval of the program coordinator.

- 90.443 Introduction to Client/Server Computing
- 90.450 Oracle Architecture and Administration
- 90.454 Oracle Structured Query Language (SQL)
- 90.474 Relational Database Concepts

#### Electives (Choose 2):

- 90.220 Visual Basic
- 90.311 Introduction to the UNIX Operating System
- 90.319 Introduction to Linux
- 90.445 SQL Database Servers
- 90.479 Advanced Database Applications: PowerBuilder

#### New Oracle Portal Track (Choose 2):

- 90.448 Oracle Portal Development
- 90.449 Introduction to Oracle Applications Development using Oracle Forms & Reports 6i
- 90.453 Advanced Oracle Administration
- 90.455 Oracle Projects
- 90.459 Oracle PL/SQL Development



### UNIX®

The Certificate in UNIX is designed for those currently in the computer industry who want to upgrade their skills, and for those with basic computer literacy who want to enter this fast-growing field. Students learn skills that are immediately applicable in the workplace as well as C Programming, the language in which most networking software is written. Many of the courses in the UNIX certificate program may be used to satisfy requirements in the Fundamentals of Information Technology and Data/Telecommunications Certificate Programs, as well as the A.S. or B.S. degrees in Information Systems. You can now earn the Certificate in UNIX online! See the Continuing Education website at <http://continuinged.uml.edu/online> for more information.

#### Required Courses:

- 90.267 C Programming
- 90.311 Introduction to the UNIX Operating System
- 90.312 UNIX Shell Programming
- 90.360 Introduction to Data Structures

#### Electives (Choose 2):

- 90.268 C++ Programming
- 90.269 Advanced C++
- 90.313 UNIX Internals Overview
- 90.316 UNIX System Administration
- 90.318 Advanced UNIX Internals/Tuning
- 90.319 Introduction to Linux
- 90.321 Linux System Administration



### Data/Telecommunications

The Certificate Program in Data/Telecommunications trains participants for positions as entry-level network administrators, LAN technicians, and system analysts responsible for networking functions in large or small companies. Many of the courses in this certificate program can be applied towards the A.S. or B.S. degree in Information Systems.

#### Required Courses:

- 90.267 C Programming
- 90.311 Introduction to the UNIX Operating System
- 90.461 LAN/WAN Technologies
- 90.462 TCP/IP and Network Architecture
- 90.463 Advanced Networking Technologies

#### Electives (Choose 1):

- 90.464 Network Management
- 90.483 Wireless Communications
- 90.484 Optical Networking – Sonet/SDH



### Intranet Development

The Certificate Program in Intranet Development provides students with an understanding of the range of skills required to develop a successful intranet. Students are required to complete an intranet survey course, a database design course, and an interface design course, as well as core programming courses. In addition, students will select two electives which support an area of focus in intranet development. Students completing the Certificate Program in Intranet Development can qualify for positions as intranet developers, database integration specialists, systems operators, systems administrators, or corporate Webmasters. Earn the Certificate in Intranet Development online! See the Continuing Education website at <http://continuinged.uml.edu/online> for more information.

#### Required Courses:

- 90.340 Intro. to the Application and Development of Intranets
- 90.341 Intranet Applications for the Organization
- 90.461 LAN/WAN Technologies
- 90.474 Relational Database Concepts

#### Electives (Choose 2):

- 90.267 C Programming
- 90.268 C++ Programming
- 90.301 JAVA Programming
- 90.305 Introduction to Perl
- 90.342 Web-Enabled Database Development
- 90.462 TCP/IP and Network Architecture
- 90.490 Intranet Practicum/Internship



### Contemporary Communications

The Contemporary Communications Certificate is intended as an introductory certificate to prepare students for work in a rapidly changing, information-driven workplace. Students will develop skills in research, analysis, writing, graphic presentation of material, and the use of technology as a tool for communication. This certificate program is interdisciplinary and draws upon the expertise and knowledge of several departments within the University. Many of the courses in this certificate can also be applied towards several other certificates and degrees offered by UMass Lowell.

#### Required Courses:

##### Written Communication (Choose 1):

- 42.221 Writing for Interactive Media
- 42.224 Business Writing
- 42.226 Technical and Scientific Communication

##### Computer-Based Communications (Choose 1):

- 90.202 Intro to PCs and MS Office
- 91.113 Exploring the Internet

##### Strategic Thinking & Effective Communication (Choose 1):

- 45.205 Argumentation and Rhetoric
- 45.207 Corporate Communications
- 62.201 Marketing Principles

##### Multimedia/Graphic Design and Development (Choose 1):

- 70.291 Introduction to Graphic Design
- 90.230 Introduction to Multimedia

#### Electives (Choose 2):

- 42.221 Writing for Interactive Media
- 42.224 Business Writing
- 42.226 Technical and Scientific Communication
- 42.300 Journalism
- 45.205 Argumentation and Rhetoric
- 45.207 Corporate Communications
- 45.356 The History, Theory, and Practice of Rhetoric
- 62.201 Marketing Principles
- 70.291 Introduction to Graphic Design
- 90.202 Intro to PCs and MS Office
- 90.230 Introduction to Multimedia
- 90.291 Intro to DHTML
- 91.113 Exploring the Internet





## Technical Writing

Those with strong writing skills and an aptitude for computers are encouraged to enter this program. Taught by practicing professionals from the high tech industry, students learn to use the most current technologies and processes. Students enrolled in the certificate program are open to special internship opportunities and can apply for scholarships sponsored by the Society for Technical Communication.

### Required Courses:

- 42.401 Principles of Technical Writing
- 42.402 Software Writing
- 42.403 Advanced Software Writing
- 90.202 Introduction to Personal Computers and Microsoft Office\*

### Electives (Choose 2):\*\*

- 42.221 Writing for Interactive Media
- 90.227 Developing Interactive Help Systems: Robo Help
- 90.228 Introduction to Adobe FrameMaker
- 90.291 Intro to DHTML

\*Note: Students who have previous computer experience may substitute a more advanced computer course for this computer course.

\*\* This is a partial list of elective courses. For a complete list of courses that may be applied as electives to this program, see the Continuing Studies Undergraduate Course Catalog or check our online course listings for computer courses with a 90. OR 92. prefix. For assistance with your course selection, please contact the Advising Center at (978) 934-2474

## Creative Arts/Media APPLICATIONS



## Website Design & Development

In our rapidly-evolving, knowledge-based economy, workers are struggling to keep up with the latest technologies and skills. Specifically, in the area of internet technology, local companies are actively pursuing employees with knowledge and skills in website design and development. Note: Students participating in this program should have basic Mac OS and/or Windows familiarity.

### Required Courses:

- 90.291 Introduction to DHTML
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.238 Website Development: FrontPage®
- 70.379 Website Design
- 70.384 Advanced Website Design and Development

### Electives (Choose 2):

- 70.262 Digital Imaging and Photography
- 70.385 Streaming Media for the Web
- 78.201 Introduction to Audio for Multimedia and the World Wide Web
- 90.230 Introduction to Multimedia
- 90.236 Instructional Design for Interactive Media
- 90.245 Website Server Administration
- 90.246 Active Server Pages
- 90.247 Web Authoring: Flash™ MX
- 90.248 Website Database Implementation
- 90.249 Developing IT Training for the Web
- 90.250 E-Commerce on the Web
- 90.292 Advanced DHTML
- 90.301 Java Programming
- 90.302 JavaScript
- 90.305 Introduction to Perl
- 90.306 Introduction to XML
- 90.347 Rich Web Development with Flash™ MX (Advanced)
- 90.348 Developing Dynamic Websites with ColdFusion® MX

## Additional Certificate Programs

UMass Lowell also offers certificate programs in:

- |                            |                                 |
|----------------------------|---------------------------------|
| Environmental Technology   | Nutrition                       |
| Hazardous Waste Management | Paralegal Studies               |
| Land Surveying             | Plastics Engineering Technology |
| Manufacturing Technology   | Spanish                         |
|                            | Wastewater Treatment            |
|                            | Water Treatment                 |



## Multimedia Applications

The Multimedia Certificate Program at UMass Lowell is one of the largest, most comprehensive programs of study in multimedia available in New England. It draws upon the expertise of several departments, colleges, and centers within the University, as well as outside expertise from industry professionals. You can now earn the Certificate in Multimedia Application online! See the Continuing Education website at <http://continuinged.uml.edu/online> for more information.

### Required Courses:

- 90.230 Introduction to Multimedia
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.232 Desktop Video Production
- 90.233 Multimedia Authoring Software: Macromedia Director® MX

### Electives (Choose 3):

- 42.221 Writing for Interactive Media
- 70.262 Digital Imaging and Photography: Photoshop®
- 70.264 Computer Graphics and Illustration
- 70.291 Introduction to Graphic Design
- 70.376 3D Computer Animation
- 70.377 Advanced Animation: After Effects®
- 70.379 Website Design
- 70.384 Advanced Website Design and Development
- 70.385 Streaming Media for the Web
- 78.201 Introduction to Audio for Multimedia and the World Wide Web
- 90.234 Designing and Developing Interactive Media
- 90.236 Instructional Design for Interactive Media
- 90.238 Website Development: FrontPage®
- 90.239 Multimedia Scripting Using Macromedia Director's Lingo™
- 90.247 Web Authoring: Flash™ MX
- 90.249 Developing IT Training for the Web
- 90.347 Rich Web Development with Flash™ MX (Advanced)
- 90.348 Developing Dynamic Websites with ColdFusion® MX



## Graphic Design & Digital Imaging

This certificate program offers students interested in breaking into graphic design and electronic publishing an innovative mix of traditional design courses along with several courses in the latest publishing technologies. From traditional graphic design to designing for multimedia and the World Wide Web, students in the program complete numerous portfolio pieces geared towards the professional market.

### Required Courses:

- 70.291 Introduction to Graphic Design
- 70.240 Fundamentals of Typography
- 70.245 Desktop Publishing: Layout and Production
- 70.262 Digital Imaging and Photography: Photoshop®
- 70.391 Advanced Graphic Design
- 70.400 Portfolio Production Seminar

### Electives (Choose 3):

- 70.264 Computer Graphics & Illustration
- 70.362 Advanced Digital Imaging
- 70.376 3D Computer Animation
- 70.377 Advanced Animation: After Effects®
- 70.379 Website Design
- 70.384 Advanced Website Design & Development
- 70.392 Design for Advertising
- 90.230 Introduction to Multimedia
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.233 Multimedia Authoring Software: Macromedia Director® MX
- 90.238 Website Development: FrontPage®
- 90.247 Web Authoring: Flash™ MX

**ATTENTION GRAPHIC DESIGN STUDENTS**  
**NEW THIS SUMMER!**  
**Check out our Macintosh® G5 Lab**

## Engineering TECHNOLOGY



## Computer Engineering Technology

The Certificate Program in Computer Engineering Technology is designed to provide students with a broad-based knowledge of digital electronics, microprocessors and advanced digital technologies. Students enrolled in the program must complete the seven courses listed below. The curriculum includes engineering science and design courses that provide a balanced view of hardware, soft-

ware, application trade-offs and the basic modeling techniques used in computer engineering. All the courses in this certificate program can be applied towards the B.S. degree in Electronic Engineering Technology.

### Required Courses:

- 17.341 Logic Design I & Laboratory
- 17.342 Logic Design II & Laboratory
- 17.353 Digital Electronics
- 17.383 Microprocessors A
- 17.384 Microprocessors B
- 90.267 C Programming
- 90.268 C++ Programming



## Electronics Technology

The Certificate Program in Electronics Technology is designed to provide students with a broad-based knowledge of circuit theory and electronics, with laboratory work included to ensure that good hands-on experience is acquired along with the deep understanding of fundamental and changing technologies. All the computer courses in this certificate program can be applied towards the A.S. or B.S. degree in Electronic Engineering Technology.

### Required Courses:

- 17.213 Circuits I
- 17.214 Circuits II and Laboratory
- 17.215 Circuits III and Laboratory
- 17.216 Circuits IV
- 17.341 Logic Design I and Laboratory
- 17.355 Electronics I & Laboratory
- 17.356 Electronics II & Laboratory
- 17.357 Electronics III & Laboratory
- 17.358 Electronics IV & Laboratory



## Computer-Assisted Manufacturing

As the United States focuses on the challenges of global economic competition, one of the key tools for sharpening our competitive edge is the use of the computer as an aid to engineering and manufacturing. The Certificate Program in Computer Assisted Manufacturing is designed to provide engineers, technicians, managers and those working in a manufacturing environment with an introduction to the computer as used to enhance industrial competitiveness. Students will apply various popular software packages and work with personal computers.

### Required Courses:

- 23.200 Computer Aided Drafting (CADr)
- 23.419 Computer Aided Manufacturing
- 23.480 Computer Aided Design (CADes)
- 23.484 Intro Pro-E OR
- 23.485 Intro to SolidWorks

### Electives (Choose 2):

- 23.101 Engineering Graphics
- 23.102 Engineering Design and Graphics
- 23.301 Manufacturing Technology Laboratory
- 23.305 Manufacturing Processes

## Criminal JUSTICE

## NEW CERTIFICATE



## Security Management and Homeland Security

Since September 11th, the U.S. Department of Labor has been predicting that the employment of security management personnel will grow faster than all other occupations due to the threat of terrorism. This part-time certificate program is designed for personnel working in the areas of public safety, security management, and law enforcement; executives in corporations responsible for overseeing in-house security programs; and information technology professionals. Criminal justice students interested in enhancing their future career prospects may also benefit from this program by broadening their studies to encompass security within private industry. All courses can be applied toward UMass Lowell's part-time Bachelor's Degree in Criminal Justice.

### Required Courses:

- 44.111 Introduction to Industrial Security
- 44.241 Physical Security
- 44.312 Security Management
- 90.385 Introduction to Information Security (Cyber Security)

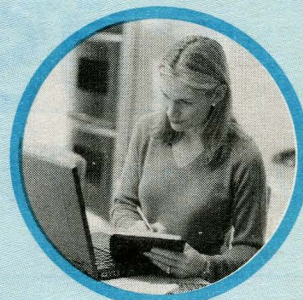
### Electives (Choose 2):

- 44.234 Criminal Law
- 44.248 Terrorism
- 44.326 Domestic Terrorism and Hate Crimes
- 44.342 Criminal Profiling
- 44.343 Forensic Psychology
- 44.380 Special Topics: Chemical, Biological, and Radiological Threats





# FINISH YOUR DEGREE ON CAMPUS, ONLINE, OR BOTH!



## THE BACHELOR'S DEGREE in Liberal Arts Available On Campus and Online!

*"I had taken a number of courses at another educational institution, but I wasn't able to finish my degree at that time. When I spoke with an advisor at UMass Lowell, they helped determine how many of the courses I had taken elsewhere could be counted towards a part-time degree at UMass Lowell. After transferring a number of those courses into my program, I was able to complete my Bachelor's Degree in Liberal Arts by taking a combination of UMass Lowell's online and on-campus courses. The advisors were extremely helpful and the flexibility of the program enabled me to complete the degree at a comfortable, convenient pace."*

—Sandra Bailey, Recent Graduate

Students whose education plans were interrupted are perfect candidates for UMass Lowell's part-time Liberal Arts Degree. The Bachelor of Liberal Arts (BLA) degree is designed to provide students with a balanced liberal arts curriculum, while also exposing them to an in-depth study in areas of concentration such as psychology, legal studies, history and sociology. By providing students with a strong foundation in these areas, this degree helps prepare them for situations that require a deeper understanding of the psychological, historical, and sociological issues affecting our society today. Flexible concentrations in the areas of psychology, history, sociology, art history, women's studies, and legal studies provide students with the maximum flexibility to tailor their program of studies around their interests.

**NEW!**

## ANNOUNCING Legal Studies Concentration for the BACHELOR OF LIBERAL ARTS DEGREE!

Courses include:

- 41.234 Criminal Law
- 41.262 Introduction to Business Law
- 41.367 Environmental Law
- 41.370 Real Estate Law
- 41.372 Sport and Entertainment Law
- 41.376 Family Law
- 41.381 Women and the Law  
*New Online This Summer!*
- 41.387 Legal Research Methods  
*New Online This Summer!*

To find out more about the part-time Liberal Arts Degree, stop by to the Continuing Studies Open House on May 11th or email [Claire\\_Murphy@uml.edu](mailto:Claire_Murphy@uml.edu) or call (978) 934-2476.

## Become more competitive and confident in the business field

UMass Lowell offers an Associate of Science in Management and a graduate certificate in Foundations of Business. These programs offer working professionals an opportunity to develop their skills and become more competitive and confident in the business field. Graduates of the College of Management are afforded a higher level of preparedness that differentiates them from competitors, because their quality education is from UMass Lowell, which is an AACSB accredited program. AACSB accreditation guarantees an extensive curriculum that excels because of its commitment to quality and continuous improvement.

For more information on our Associate's Degree in Management call the Advising Center at (978) 934-2474. For more information on our Foundations of Business Certificate call the MBA Program at (978) 934-2848.

## EARN A B.S. IN INFORMATION TECHNOLOGY

ON CAMPUS OR ONLINE

## THE BACHELOR'S DEGREE IN Information Technology

*"UMass Lowell has a reputation for being on the cutting-edge of technology, so when I decided to pursue a degree in Information Technology, it was a logical choice. The professors have helped me learn many new skills which I can apply to my future career."*

—Cheryl Gray, Student

Students who graduate with a degree in Information Technology are able to manage networks, write software, build web pages and multimedia presentations, or create and manage databases, depending on the areas they choose to study. The curriculum strikes a balance between theoretical and applied uses of information technology and is taught by faculty who are cutting edge practitioners as well as educators. This degree provides students with the flexibility to integrate previous college and work experience with a program tailored to the student's preferred area of specialization. Concentrations are formulated around areas such as programming, networking, database design and management, graphic design, or multimedia, and combined with general education courses to enable students to complete their degree as quickly as possible with the knowledge they need for their careers.

*"I knew I had to get a high-demand credential and that I had to do it quickly. By taking a mix of online and on campus courses, I was able to accelerate my progress towards earning a degree in Information Technology."*

—Valerie Cox, Recent Graduate

For more information on our B.S. in Information Technology, please visit our website or call the Advising Center at 978-934-2474.

## EARN A BACHELOR'S DEGREE IN Engineering Technology

Civil Engineering Technology • Electronic Engineering Technology  
Mechanical Engineering Technology

UMass Lowell's part-time Engineering Technology degree programs are designed to produce graduates who work with, and are able to manage machines, materials, people and processes for industrial firms all over the world. The University's Civil, Mechanical and Electronic Engineering Technology degrees feature a solid foundation in the tools required for problem solving in today's complex world. Our Engineering Technology programs provide the opportunity to prepare for the future while working full time and studying part time. Our advisors will work with you to evaluate credit courses you've taken elsewhere to see if they can be applied towards our degree programs.

*"The professors and educational staff at UMass Lowell are extremely passionate about what they do. Their enthusiasm for teaching is refreshing. After almost a 20-year absence from college, they helped make the learning experience practical, interesting, and even fun. As an adult returning to a University to better my education, I was excited about the opportunity to challenge myself. The professors at UMass Lowell gave me the opportunity to realize skills I never knew I had."*

—Edward C. Page, Recent Engineering Technology Graduate

**Engineering Technology is your path to success...**

For a free brochure on our part-time Engineering Technology degree programs, call 978-934-2143 or email [Continuing\\_Education@uml.edu](mailto:Continuing_Education@uml.edu)

## DEGREE PROGRAMS

The following degree programs are available on a part-time evening basis:

### COLLEGE OF ENGINEERING

#### Associate's Degrees

- Civil Engineering Technology
- Civil Engineering Technology: Water Treatment Option
- Civil Engineering Technology: Wastewater Treatment Option
- Civil Engineering Technology: Surveying Option
- Electronic Engineering Technology
- Mechanical Engineering Technology

#### Bachelor's Degrees

- Civil Engineering Technology
- Civil Engineering Technology: Environmental Option
- Electronic Engineering Technology
- Mechanical Engineering Technology: Manufacturing Option
- Mechanical Engineering Technology: Plastics Option

### COLLEGE OF ARTS AND SCIENCES

#### Associate's Degree

- Information Technology

#### Bachelor's Degrees

- Applied Mathematics
- Criminal Justice
- Criminal Justice: Paralegal Option
- Information Technology
- Information Technology: Business Minor Option
- Liberal Arts
- Mathematics

- Mathematics: Statistics Concentration
- Mathematics: Teacher Concentration

### COLLEGE OF MANAGEMENT

#### Associate's Degree

- Management

#### Bachelor's Degree

- Business Administration



# CUSTOMIZED TRAINING

*Designed to meet your company's business needs*

\* [HTTP://CONTINUINGED.UML.EDU/CORPORATE](http://continuinged.uml.edu/corporate)

With a large selection of courses and expert instructors, the University of Massachusetts Lowell serves as an important educational resource for companies both nationally and internationally. The University — which is particularly well-known for its Engineering, Information Technology, Computer Science, Health, Management, and Manufacturing programs — provides training to employees on campus and at numerous company locations. **For more information on onsite training or a free brochure, call (978) 934-2495.**

## Announcing UMass Lowell's 2004 Corporate Signature Seminar Series!

*Intensive seminars designed to meet your high priority training needs...*



APRIL — AUGUST 2004

### Project Management

**00.604-041 Intro to Project Management**  
Meets 6:00-10:00pm; Apr 6, 13, 20, 27, May 4, 11 \$695

**00.604-042 Intro to Project Management**  
Meets 9:00am-5:00pm; May 18-20 \$750

**00.604-043 Intro to Project Management**  
Meets 9:00am-5:00pm; Aug 3-5 \$750

**00.608-041 Total Project Control: Planning & Scheduling**  
Meets 9:00am-5:00pm; May 6-7 \$550

**00.609-041 Total Project Control: Resources & Budgeting**  
Meets 9:00am-5:00pm; May 25-26 \$550

**00.610-041 Microsoft® Project**  
Meets 9:00am-5:00pm; June 10-11 \$550

**00.611-041 Discovering the Leader Within and Improving Organizational Performance**  
Meets 9:00am-5:00pm; May 20 \$225

### Marketing

**00.700-041 Web Marketing**  
Meets 9:00am-5:00pm; May 13-14 \$450

### Business Writing

**00.601-041 Effective Business Writing**  
Meets 9:00am-4:30pm; May 13 \$300

**00.601-042 Effective Business Writing**  
Meets 9:00am-4:30pm; June 2 \$300

**00.601-043 Effective Business Writing**  
Meets 6:30-9:00pm; May 5, 12, 19 \$200

**00.601-044 Effective Business Writing**  
Meets 6:30-9:00pm; June 14, 21, 28 \$200

**00.612-041 Writing Winning Grants**  
Meets 9:00am-5:00pm; June 17 \$225

### Information Technology

**00.508-041 C++ Templates**  
Meets 9:00am-5:00pm; June 23-24 \$550

**00.509-041 Object Oriented Analysis and Design Using UML**  
Meets 9:00am-5:00pm; June 7-10 \$725

**00.505-041 Visual Basic .NET**  
Meets 9:00am-5:00pm; Aug 9-12 \$725

### Data Mining and Bioinformatics

**00.201-041 Visualization and Data Mining for Knowledge Discovery**  
Meets 9:00am-5:00pm; May 27 \$295

**00.200-041 Database Design for Bioinformatics**  
Meets 9:00am-5:00pm; June 1-2 \$450

### Engineering Productivity

**00.902-041 AutoCAD 2004 2D Quick Start**  
Meets 9:00am-5:00pm; May 18-20 \$650

**00.900-041 Applied Statistics for Engineers**  
Meets 6:00-9:30pm; May 4, 11, 18 \$295

**00.901-041 Engineering Economics**  
Meets 6:00-9:30pm; June 8, 15, 22 \$295

### Chemical Safety & Security Management

**00.800-041 Chemical Safety: A Proactive Approach to Chemical Management & Security**  
Meets 9:00am-5:00pm; April 21-22 \$450

To register or receive a free copy of our new signature seminars brochure, call today at (978) 934-2405 or visit our corporate website at <http://continuinged.uml.edu/corporate>.

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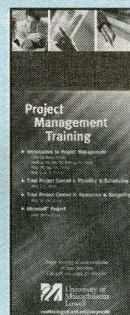
TUESDAY, APRIL 27TH FROM 6:30-8:30 P.M.

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"Microsoft Project® is a powerful project management tool and one that can be intimidating and frustrating to learn. We customize Microsoft Project so students can immediately be effective at planning and managing projects upon completion of the seminar."

**00.604-041 Intro to Project Management**  
Meets 6:00-10:00pm; Apr 6, 13, 20, 27, May 4, 11 \$695

**00.604-042 Intro to Project Management**  
Meets 9:00am-5:00pm; May 18-20 \$750

**00.604-043 Intro to Project Management**  
Meets 9:00am-5:00pm; Aug 3-5 \$750

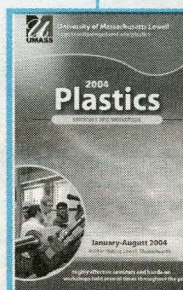
**00.608-041 Total Project Control: Planning & Scheduling**  
Meets 9:00am-5:00pm; May 6-7 \$550

**00.609-041 Total Project Control: Resources & Budgeting**  
Meets 9:00am-5:00pm; May 25-26 \$550

**00.610-041 Microsoft® Project**  
Meets 9:00am-5:00pm; June 10-11 \$550

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## FIND OUT HOW EASY IT IS TO TAKE A COURSE OR COMPLETE YOUR DEGREE ONLINE!

Looking for our online course listings?

They are now integrated into the Undergraduate & Graduate Course Listings on pages 8–17.

MAY 11TH!

JOIN US AT OUR FREE DISTANCE EDUCATION ORIENTATION ON TUESDAY, MAY 11, 2004! CALL (978)-934-2474 TO RESERVE YOUR SEAT TODAY.

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### Online Undergraduate Degree Programs

- \*Associate's Degree in Information Technology
- \*Bachelor's Degree in Information Technology
- \*Bachelor's Degree in Information Technology: Business Minor
- \*Bachelor's Degree in Liberal Arts

### Online Graduate Degree Programs

- \*Master's Degree in Criminal Justice
- \*Master's Degree in Educational Administration
- NEW!** \*Master's Degree in Reading and Language

### Online Undergraduate Certificate Programs

- \*Certificate in Contemporary Communications
- \*Certificate in Multimedia Applications
- \*Certificate in UNIX
- \*Certificate in Fundamentals of Information Technology
- \*Certificate in Intranet Development
- \*Certificate in Data/Telecommunications
- \*Certificate in Plastics Engineering Technology
- NEW!** \*Certificate in Paralegal Studies
- NEW!** \*Certificate in Security Management and Homeland Security

### Online Graduate Certificate Programs

- \*Certificate in Clinical Pathology
- \*Certificate in Foundations of Business

Call (978) 934-2474 or visit <http://continuinged.uml.edu/online> to test drive a Distance Education course today! The University of Massachusetts System offers additional courses and programs online. Visit [www.UMassOnline.net](http://www.UMassOnline.net) for more details.

Please note: There are no veteran or senior citizens waivers for distance learning courses. Please refer to page 18.

## Learn to Teach Online, Without Commuting to Campus.

The UMass Lowell Online Teaching Institute will help you develop or enhance your online teaching skills. These instructor-led online courses share the latest techniques in online course development and pedagogy.

### Introduction to Online Teaching Strategies

- 00.054-031 June 2nd – June 29th
- 00.054-032 July 7th – August 3rd

### Teaching Online with IntraLearn

- 00.055-031 July 7th – August 3rd
- 00.055-032 August 4th – August 31st

These non-credit courses are \$499 per person per session; special reduced rate if 3 or more participants attend from the same institution. For course descriptions or more information, call (978) 934-2142 or visit our website <http://continuinged.uml.edu/online/institutes.htm>. To register for a course call (978) 934-2700.

**Online Education Course Registration and Confirmation** Students should make sure they have fulfilled the particular course prerequisites prior to registering for a course. To register for a UMass Lowell Online Education course, see the registration form on page 20, or call (978) 934-2700 or toll free (800) 480-3190. Be sure to provide your email address when you register!

All students are assigned a user name, password, and the Website address for their course. To obtain this information, each student must complete the Online Registration Confirmation. Visit the Online Education Website at <http://continuinged.uml.edu/online> and complete the Online Registration Confirmation two business days after registering for your course.

**Student Technical Skills and Requirements** All students new to Online Education should complete the free Online Demonstration course available on the Online Education Website. Various internet utilities (e.g. mlRC, ftp, telnet) are required for some Online Education courses. Students are responsible for learning to use course-related utilities before enrolling in an Online Education course. Tutorials are available on the Online Education Website.

**Online Course Software Requirements** — Be sure to check our Website at <http://continuinged.uml.edu/online> to confirm course software requirements.

For the latest information regarding our online courses and programs, visit the Online Education website at: <http://continuinged.uml.edu/online> or call (978) 934-2474.

## EARN A MASTER'S DEGREE IN EDUCATION ENTIRELY ONLINE!

UMass Lowell's Graduate School of Education is pleased to announce that it now has two Master's Degrees in Education that are available entirely online: the Master's Degree in Educational Administration and the Master's Degree in Reading and Language. Students may take up to four courses on a non-matriculated basis before applying for admission into the degree program.

### NOW ONLINE! M.Ed. in Reading and Language

Total courses required: 10

#### Foundations of Education — One course:

- 01.630 Diversity Issues for School Leaders (Summer 2004)

#### Research and Evaluation — One course:

- 07.541 Practitioner Action Research (Fall 2004)

#### Specialization in Reading and Language — Seven courses:

- 06.511 Reading in the Content Areas (Fall 2004)
- 06.522 Young Adult Literature (Summer 2004)
- 06.527 Language Acquisition (Summer 2004)
- 06.528 Assessment of Reading and Language Disabilities (Fall 2004)
- 06.529 Treatment of Reading and Language Disabilities (Spring 2005)

- 06.531 Organization and Supervision of Reading and Language (Summer 2004)

- 06.549 Theory & Research: Reading and Language (Summer 2005)

#### Practicum/Seminar — One course:

- 06.548 Practicum in Reading and Language (Fall 2005)

Note: All 10 courses are required for licensure as Reading Specialist in Massachusetts.

**Also available:**  
**M.Ed. in Educational Administration.**  
**Now in its 3rd Year Online!**

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For additional information or an admissions packet, email us!!! [edoffice@uml.edu](mailto:edoffice@uml.edu)

For an online course schedule please visit our website! <http://continuinged.uml.edu/online>



UNDERGRADUATE CREDIT COURSES

May 24–June 30  
Summer Session I

**Day Classes** begin on May 24 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.  
**M/W Evening Classes** begin on May 24 and include 2 FRIDAYS: June 4 and June 18 at the regularly scheduled hours.  
**T/Th Evening Classes** begin on May 25 and include 2 FRIDAYS: June 11 and June 25 at the regularly scheduled hours.

Reminder: This course listing combines the University of Massachusetts Lowell day school courses and the continuing studies courses. It is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Accounting	60.201-011	Accounting/Financial	T/Th	6:00-9:05 pm	3		Charles Thompson
	60.201-031	Accounting/Financial (5/24-8/19)	> Online Course		3		Clairmont Carter
	60.202-011	Accounting/Managerial	M/W	6:00-9:05 pm	3	P: 60.201	George Nogler
	60.202-031	Accounting/Managerial (5/24-8/19)	> Online Course		3	P: 60.201; requires proctored exams	Stephen Collins
	60.331-011	Cost Management Systems	M-Th	8:00-10:00 am	3	P: 60.202, BSBA students (non-Accounting majors), and College of Management Dean permission	Laura Scanlon
Art/Computer Graphics	NEW LAB! 70.291-011	Introduction to Graphic Design/Macintosh	M/W	6:30-9:35 pm	3	P: Basic Mac familiarity	Alison Poor-Donahue
	70.379-011	Website Design: Dreamweaver®/Macintosh	T/Th	6:30-9:35 pm	3	P: 90.238, and 90.231 or 70.262	Alison Poor-Donahue
NOTE: While the above courses will not directly transfer into the Art Department's Bachelor of Fine Arts Day School degree program, certain two-course clusters may be accepted for transfer upon prior department approval. CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 4 for required courses.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)							
Art History	58.101-011	Art Appreciation	T/Th	7:00-10:05 pm	3	AE, HSA, Cultural Diversity	John Christ
	58.203-031	History of Art I: Prehistoric to Medieval (5/24-8/19)	> Online Course		3	AE, HSA, Cultural Diversity	Liana Cheney
	58.221-011	Twentieth Century Art	M/W	7:00-10:05 pm	3	HSA	John Christ
	58.340-031	Women and Art (5/24-8/19)	> Online Course		3	HSA, AE	Liana Cheney
	58.494-011	Directed Studies	TBA	TBA	3	P: Instructor permission	Liana Cheney
	58.496-011	Practicum in Art History	TBA	TBA	3	P: Instructor permission	Liana Cheney
Biological Sciences	83.101-011	Life Science I	T/Th	6:00-9:05 pm	3	SC	Valerie Graves
	83.214-031	Human Ecology (5/24-8/19)	> Online Course		3	SL	Priscilla Mattson
Chemistry	84.101-031	Applied Chemistry for Non-Scientists (5/24-8/19)	> Online Course		3	SL	Philip Lamprey
	84.101-032	Applied Chemistry for Non-Scientists (5/24-8/19)	> Online Course		3	SL	Philip Lamprey
	84.111-011	General Chemistry I	M-Th	10:15 am-12:15 pm	3	C: 84.113; SL	Judith Goldsberry
	84.113-011	General Chemistry Lab I	M/W/Th	2:45-5:45 pm	1 (3)	C: 84.111; SL	Paul Damour
	84.121-011	Chemistry I	M/W	7:00-10:05 pm	3	C: 84.123; SL	Judith Goldsberry
	84.122-011	Chemistry II	M/W	7:00-10:05 pm	3	P: 84.121; C: 84.124; SL	Department Faculty
	84.123-011	Chemistry Lab I	T/Th	7:00-10:05 pm	1 (3)	C: 84.121; SL	Paul Damour
	84.124-011	Chemistry Lab II	T/Th	7:00-10:05 pm	1 (3)	C: 84.122; SL	Department Faculty
	84.221-011	Organic Chemistry I	M/T/Th	2:45-5:15 pm	3	P: 84.122; C: 84.229	Gene Davis
	84.221-012	Organic Chemistry I	T/Th	7:00-10:05 pm	3	P: 84.122; C: 84.229	Gene Davis
	84.229-011	Organic Chemistry Laboratory IA	M/W	6:00-10:00 pm	1 (4)	C: 84.221	Judith Freeman
	84.229-012	Organic Chemistry Laboratory IA	T/Th	6:00-10:00 pm	1 (4)	C: 84.221	Judith Freeman
Cinema	50.376-011	French Cinema and Society	M/W	7:00-10:05 pm	3	AHD; conducted in English	Joseph Garreau
	52.335-011	Cinema and Italian Americans	M-Th	10:15 am-12:15 pm	3	VCA	Mario Aste
	52.378-011	Italian Cinema and Culture	M-Th	8:00-10:00 am	3	VCA	Mario Aste
Civil and Environmental Engineering	14.203-011	Statics (alternate 22.211)	M-Th	3:00-5:00 pm	3	P: 92.132, 95.141	Faize Jamil
Client/Server Technology	(See courses listed under Information Technology) CERTIFICATE IN CLIENT/SERVER DATABASE DESIGN AND ADMINISTRATION (See page 3 for required courses.)						
Computer Science	91.113-031	Exploring the Internet (5/24-8/19)	> Online Course		3	Non-CS Majors only	Patrick Krolak
	94.301-021 *	Organization of Programming Languages (5/24-8/26)	TBA	TBA	4	P: 91.102	Department Faculty
	94.305-021 *	Computer Architecture (5/24-8/26)	TBA	TBA	3	P: 91.250 or equivalent	Department Faculty
	94.308-021 *	Introduction to Operating Systems (5/24-8/26)	TBA	TBA	3	P: 94.305, 91.250 or equivalent	Department Faculty
	94.404-021 *	Analysis of Algorithms (5/24-8/26)	TBA	TBA	3	P: 91.250, 91.322	Department Faculty
*Requires permission of Graduate Computer Science Coordinator							
Criminal Justice (See also Paralegal Studies)	44.101-011	Introduction to the Criminal Justice System	T/Th	7:00-10:05 pm	3		Joseph Burke
	44.111-011	Introduction to Industrial Security	M/W	6:00-9:05 pm	3		Gail Hunter
	NEW! 44.281-011	Criminal Justice Ethics	M/W	6:00-9:05 pm	3		Ronald Guilmette
	44.342-031	Criminal Profiling (5/24-8/19)	> Online Course		3		Allan Roscoe
	NEW! 44.385-031	Criminal Mind and Behavior (5/24-8/19)	> Online Course		3		Alexandria Weida
	44.478-011	Child Maltreatment	T/Th	6:00-9:05 pm	3		Alicen McGowan
	44.496-011	Criminal Justice Practicum	TBA	TBA	3	P: Instructor permission	Allan Roscoe
CERTIFICATE IN COMMUNITY POLICING CERTIFICATE IN SECURITY MANAGEMENT AND HOMELAND SECURITY (See page 4 for required courses.) CERTIFICATE IN PARALEGAL STUDIES							
Cultural Studies	54.315-011	Latin American Civilization & Culture	M/W	7:00-10:05 pm	3		Javier Vargas
Economics	49.201-011	Economics I (Microeconomics)	M-Th	8:00-10:00 am	3	P: 90.111; BS	Ronald Olive
	49.201-012	Economics I (Microeconomics)	T/Th	6:00-9:05 pm	3	P: 90.111; BS	Ronald Olive
	49.201-031	Economics I (Microeconomics) (5/24-8/19)	> Online Course		3	P: 90.111; BS	Michael Carter
	49.201-032	Economics I (Microeconomics) (5/24-8/19)	> Online Course		3	P: 90.111; BS	Nurul Islam
	49.202-011	Economics II (Macroeconomics)	M/W	6:00-9:05 pm	3	P: 90.111; BS	Patricia Machado
	49.202-031	Economics II (Macroeconomics) (5/24-8/19)	> Online Course		3		Michael Carter
	49.202-032	Economics II (Macroeconomics) (5/24-8/19)	> Online Course		3		Nurul Islam
	49.211-011	Statistics I	M-Th	10:15 am-12:15 pm	3	P: 92.122 or equivalent	Harjeet Khosla
	49.211-012	Statistics I	M/W	6:00-9:05 pm	3	P: 92.122 or equivalent	Harjeet Khosla



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Electrical and Computer Engineering</b>	16.201-021	Circuit Theory I (5/24-7/30)	*M/W	10:15 am-12:15 pm	3	P: 92.132; C: 16.207	Tenneti Rao
	16.207-021	Circuits I Laboratory (5/24-7/30)	*Mon	7:00-10:00 pm	2 (3)	P: 92.132; C: 16.201	Frank Tredeau
	16.265-021	Logic Design (5/24-7/30)	*T/Th	10:15 am-12:15 pm	3	P: 25.108 or 91.101	Anh Tran
	16.311-021	Electronics I Lab (5/24-7/30)	*Tues	4:00-7:00 pm	2 (3)	P: 16.202; C: 16.365	Alan Rux
	16.364-021	Engineering Math (5/24-7/30)	*M/W	12:30-2:30 pm	3	P: 92.234, 16.201	Xuejun Lu
	16.365-021	Electronics I (5/24-7/30)	*M/W	10:15 am-12:15 pm	3	P: 16.202, 92.238; C: 16.311	Mufeed Mah'd
	16.412-011	Directed Studies	TBA	TBA	3		Ziyad Salameh
	16.421-021	Real Time D.S.P (5/24-7/30)	M/W	6:00-8:00 pm	3	P: 16.317	Mufeed Mah'd
	16.428-011	Alternative Energy Sources	M/W	6:00-9:05 pm	3	P: Permission of instructor	Ziyad Salameh
	16.429-011	Electric Vehicle Technology	T/Th	6:00-9:05 pm	3	P: Permission of instructor	Ziyad Salameh
	16.491-011	Industrial Experience	TBA	TBA	3	P: Permission by instructor	Ziyad Salameh
*Ten-week Electrical Engineering day and evening classes are scheduled from May 24 to July 30. Mon./Wed. classes include an additional class on Friday, June 25. All other classes are scheduled from May 24 to June 30.							
<b>Electronic Engineering Technology</b>	17.130-011	Electrical Basics and Laboratory	T/Th	7:00-10:05 pm	2 (3)	P: Instructor permission; not available for E.E.T. majors	Jan Yang
	17.354-011	PSpice Simulation	T/Th	7:00-10:05 pm	2 (3)		James Drew
	CERTIFICATE IN COMPUTER ENGINEERING TECHNOLOGY (See page 4 for required courses.) CERTIFICATE IN ELECTRONICS TECHNOLOGY (See page 4 for required courses.)						
<b>English</b>	42.101-011*	College Writing I	M-Th	8:00-10:00 am	3		William Coughlin
	42.101-031*	College Writing I (5/24-8/19)	> Online Course		3	P: Requires MS Word	Richard Keating
	42.101-032*	College Writing I (5/24-8/19)	> Online Course		3	P: Requires MS Word	William Allen
	42.102-011	College Writing II	M-Th	10:15 am-12:15 pm	3	P: 42.101	William Coughlin
	42.102-012	College Writing II	T/Th	7:00-10:05 pm	3	P: 42.101	Clifford Lewis
	42.102-031	College Writing II (5/24-8/19)	> Online Course		3	P: 42.101; requires MS Word	Marie Salamone
	42.103-011*	College Writing I for International Students	T/Th	6:00-9:05 pm	3		Jan LaFleur
	42.212-011	The Short Story	M-Th	8:00-10:00 am	3	P: 42.102; LT	Todd Avery
	42.212-031	The Short Story (5/24-8/19)	> Online Course		3	P: 42.102; LT; requires MS Word	Ashmita Khasnabish
	42.217-011	The Horror Story	T/Th	7:00-10:05 pm	3	P: 42.102; LT	Todd Avery
	42.224-031**	Business Writing (5/24-8/19)	> Online Course		3	P: 42.102; requires MS Word	Nancy Brown
	42.224-032**	Business Writing (5/24-8/19)	> Online Course		3	P: 42.102; requires MS Word	Nancy Brown
	42.226-031**	Technical and Scientific Communication (5/24-8/19)	> Online Course		3	P: 42.102; requires MS Word	Peter Payack
	42.226-041**	Technical and Scientific Communication (Held at V.A. Medical Conference Center, Bedford, MA)	T/Th	6:00-9:05 pm	3	P: 42.102	Peter Payack
	42.232-011	Turning Fiction into Film	M/W	7:00-10:05 pm	3	P: 42.102; LT	Dina Bozicas
	42.253-011	Literature of Sports	M-Th	8:00-10:00 am	3	P: 42.102; LT	William Hersey
	42.294-011	History of American Literature I	M-Th	10:15 am-12:15 pm	3	P: 42.102; LT	Department Faculty
	42.302-011	Creative Writing: Fiction	M/W	7:00-10:05 pm	3	P: 42.102	Jay Atkinson
	42.303-011	Creative Writing: Poetry	T/Th	7:00-10:05 pm	3	P: 42.102	Gregoire Turgeon
	42.320-011	Personal and Reflective Writing	M-Th	10:15 am-12:15 pm	3	P: 42.102	William Hersey
	42.402-021	Software Writing (5/24-8/19)	Tues	6:00-9:00 pm	3	P: 42.401	Stephen Murphy
*Students will not receive credit for both 42.101 and 42.103. **Students will not receive credit for both 42.224 and 42.226. CERTIFICATE IN TECHNICAL WRITING (See page 4 for required courses.)							
<b>Environmental Science</b>	87.115-011	Astronomy	T/Th	7:00-10:05 pm	3	SL	Arnold O'Brien
	87.117-011	Astronomy Lab	M/W	7:00-10:05 pm	1 (2)	SL	Arnold O'Brien
<b>Graphic Design and Digital Imaging</b>	See courses listed under Art and Information Technology. CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 4 for required courses.)						
<b>Health Professions</b>	30.201-031	Community Health (5/24-8/19)	> Online Course		3	Open to all students	Nicole Champagne
	30.315-011	Kinesiology and Lab	M-F	10:15 am-12:20 pm	4	P: Two semesters each: Anatomy and Physiology, Physics; not open to UMass Lowell Exercise Physiology majors	Department Faculty
	35.101-011	Human Anatomy and Physiology I	T/Th	6:15-9:15 pm	3	C: 35.103; SL	Paul Fierimonte
	35.103-011	Human Anatomy and Physiology I Lab	T/W/Th	2:00-5:00 pm	1 (3)	C: 35.101; SL	Edward Kostek
	36.350-011	Human Biochemistry	M-Th	10:15 am-12:15 pm	3	P: 35.252 or equivalent	Thomas Wilson
	36.414-031	Infectious Disease (5/24-8/19)	> Online Course		3	P: One semester of General Microbiology	S. Fessia-Richardson
	CERTIFICATE IN NUTRITION						
<b>History (See also Art History)</b>	43.105-011	Western Civilization to 1715	M-Th	8:00-10:00 am	3	HS	David Cohen
	43.107-031	World History I (5/24-8/19)	> Online Course		3	HS	David Kalivas
	43.206-031	American Economic History (5/24-8/19)	> Online Course		3	HS	Joseph Lipchitz
	43.242-031	The Second World War (5/24-8/19)	> Online Course		3	HS; requires proctored exams	Donald Mattheisen
	43.274-031	Native American History (5/24-8/19)	> Online Course		3	HS; requires proctored exams	Diane Lewis
	NEW! 43.280-011	Sub-Saharan Africa: Colonies and Independent States	M-Th	10:15 am-12:15 pm	3	HS	Barbara McCahill
	43.350-011	Colonial America	M/W	6:30-9:35 pm	3	HS	Harry Hubbard
<b>Information Technology (Including Multimedia and Graphics)</b>	90.160-011	Introduction to Information Systems	T/Th	6:00-9:05 pm	3		Christopher Gambon
	90.160-031	Introduction to Information Systems (5/24-8/19)	> Online Course		3		Syama Chaudhuri
	90.160-032	Introduction to Information Systems (5/24-8/19)	> Online Course		3		Syama Chaudhuri
	90.171-031	Applications Software: Access (5/24-8/19)	> Online Course		3	P: Requires MS® Access 2000 or above; familiarity with MSWord and MS Excel	Janis Ozimek-Maier
	90.180-031	Applications Software: Excel (5/24-8/19)	> Online Course		3	P: 90.202 or equivalent; requires MS Excel 2003	Janis Ozimek-Maier
	90.202-031	Introduction to PCs and MS Office (5/24-8/19)	> Online Course		3	P: Requires MS® Office® XP	Robin Desmond
	Free software 90.211-011*	Introduction to Programming with C - Part I	T/Th	7:00-10:05 pm	3	P: No previous prog. experience required	Helen Wang
	Free software 90.211-031*	Introduction to Programming with C - Part I (5/24-8/19)	> Online Course		3	P: No previous programming experience required; ANSI C/C++ standard compiler required	James Sears
	Free software 90.212-011*	Introduction to Programming with C - Part II	M/W	6:00-9:05 pm	3	P: 90.211	Lee Clark
	Free software 90.212-031*	Introduction to Programming with C - Part II (5/24-8/19)	> Online Course		3	P: 90.211; requires ANSI C/C++ standard compiler	Lisa Panagopoulos
	Free software 90.220-011	Visual Basic®	T/Th	7:00-10:05 pm	3	P: Requires Visual Basic .NET	Leo Javits
	Free software 90.220-031	Visual Basic (5/24-8/19)	> Online Course		3	P: Familiarity with Windows and working knowledge of a high-level language; requires Visual Studio .NET	Carol Thomas
	Free software 90.224-031	Advanced Visual Basic (5/24-8/19)	> Online Course		3	P: 90.220, familiarity with Visual Basic® .NET; requires Visual Studio .NET	Carol Thomas
	90.230-011	Introduction to Multimedia/Windows	T/Th	7:00-10:05 pm	3	P: Basic Mac or Windows proficiency	Chris Perry
	90.230-031	Introduction to Multimedia (5/24-8/19)	> Online Course		3	P: Basic Mac or Windows proficiency; requires eZedia MX software	Rob Graham



## UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
	90.231-011	Graphics for Multimedia and the World Wide Web/Windows	M/W	7:00-10:05 pm	3	P: 90.230	Marina Javits
	90.231-031	Graphics for Multimedia and the World Wide Web/Windows (5/24-8/19)	➤ Online Course		3	P: 90.230; requires Photoshop 5.0 or higher; access to a scanner	Randy Howe
	90.238-031	Website Development: Front Page/Windows (5/24-8/19)	➤ Online Course		3	P: 90.291; 90.231 recommended; requires MS FrontPage 2003 (Academic Version but not FrontPage Express)	Judith Feeney
	90.247-011	Web Authoring: Flash MX/Windows	M/W	6:30-9:35 pm	3	P: 90.291, 90.302 or programming familiarity; req. Macromedia Flash MX	Chris MacDonald
	90.247-031	Web Authoring: Flash MX (5/24-8/19)	➤ Online Course		3	P: 90.291, 90.302 or prog. familiarity; requires Macromedia Flash MX	Michael Murie
Free software	90.267-041*	C Programming (Held at V.A. Medical Conference Center, Bedford, MA)	M/W	6:00-9:05 pm	3	P: Previous programming experience	Nancy Kiernan
Free software	90.267-012*	C Programming	M/W	7:00-10:05 pm	3	P: Previous programming experience	Helen Wang
Free software	90.267-031*	C Programming (5/24-8/19)	➤ Online Course		3	P: Previous programming experience; requires C compiler software	Timothy Niesen
Free software	90.268-011	C++ Programming	M/W	7:00-10:05 pm	3	P: 90.267 or 90.212	Thomas Kostizak
Free software	90.268-031	C++ Programming (5/24-8/19)	➤ Online Course		3	P: 90.267 or 90.212; req. C++ compiler software	Mark Hertel
Free software	90.269-031	Advanced C++ (5/24-8/19)	➤ Online Course		3	P: 90.268, exper. with Data Structures; requires C++ compiler software	Mark Hertel
Free software	90.270-031	Visual C++ (5/24-8/19)	➤ Online Course		3	P: 90.268; requires Visual Studio.NET	Barbara Bancroft
Free software	90.271-011	C# (C Sharp)	T/Th	7:00-10:05 pm	3	P: 90.268 or 90.301	James Brzowski
	90.291-031	Introduction to DHTML (5/24-8/19)	➤ Online Course		3		William Dubie
	90.292-031	Advanced DHTML (5/24-8/19)	➤ Online Course		3	P: 90.291	Isobel Davis
	90.297-031	Introduction to Java Programming (5/24-8/19)	➤ Online Course		3	P: Previous programming experience required; Sun Java Development Kit required	Lance Smith
	90.297-011	Introduction to Java Programming	M/W	6:30-9:35 pm	3 (3)	P: Previous prog. experience required	Peter Weston
	90.301-011	Java™ Programming/Windows	T/Th	7:00-10:05 pm	3	P: 90.297 or 90.268	Elizabeth Kramer
	90.301-031	Java Programming (5/24-8/19)	➤ Online Course		3	P: 90.297 or 90.268; requires Sun Java Development Kit	Elizabeth Kramer
	90.302-031	JavaScript (5/24-8/19)	➤ Online Course		3	P: 90.291 or knowledge of HTML	David Sciuto
	90.303-031	Advanced Java™ Programming (5/24-8/19)	➤ Online Course		3	P: 90.301; req. Sun Java Development Kit	Fred Yao
	90.305-011	Introduction to Perl	T/Th	7:00-10:05 pm	3	P: 90.267	Jonathan Worthley
	90.305-031	Introduction to Perl (5/24-8/19)	➤ Online Course		3	P: 90.267	Gregory Rushton
	90.306-031	Introduction to XML (5/24-8/19)	➤ Online Course		3	P: 90.291 and 90.474; requires XML Writer Version 2.0	David Sciuto
	90.307-031	Advanced Topics in Java and XML (5/24-8/19)	➤ Online Course		3	P: 90.303, 90.306; requires Sun Java Development Kit	Mark Cohen
	90.311-011	Introduction to the UNIX® Operating System	T/Th	7:00-10:05 pm	3		Andrew Garside
	90.311-012	Introduction to the UNIX Operating System	M/W	7:00-10:05 pm	3		Partha Mittra
	90.311-031	Introduction to the UNIX Operating System (5/24-8/19)	➤ Online Course		3		Fred Vegliante
	90.312-011	UNIX® Shell Programming	T/Th	7:00-10:05 pm	3	P: 90.311, and 90.267 or 90.212	Sean McGowan
	90.312-031	UNIX Shell Programming (5/24-8/19)	➤ Online Course		3	P: 90.311, and 90.267 or 90.212	Michael Richards
	90.319-031	Introduction to Linux® Programming (5/24-8/19)	➤ Online Course		3	P: Requires Red Hat Standard Ed. Version 9.0	Justin Seiferth
	90.321-031	Linux System Administration (5/24-8/19)	➤ Online Course		3	P: Shell Scripting experience; requires Red Hat Standard Ed. Version 9.0	Barbara Bancroft
Free software	90.360-031	Introduction to Data Structures Using C (5/24-8/19)	➤ Online Course		3	P: 90.364, and 90.267 or 90.212	Isobel Davis
Free software	90.364-011	Problem Solving with C	M/W	7:00-10:05 pm	3	P: 90.212 or 90.267	Lisa Panagopoulos
Free software	90.364-031	Problem Solving with C (5/24-8/19)	➤ Online Course		3	P: 90.212 or 90.267	Sean McGowan
Free software	90.443-011	Fundamentals of Client/Server Computing	T/Th	6:00-9:05 pm	3		Umesh Bhargava
	90.450-021	Oracle Architecture and Administration (5/24-8/19)	Mon	7:00-10:00 pm	3	P: 90.474	Jeffrey Yang
	90.450-022	Oracle Architecture and Administration (5/24-8/19)	Sat	9:00am-12:00 pm	3	P: 90.474	Jeffrey Yang
	90.457-011	Network Security	M/W	7:00-10:05 pm	3	90.462; Junior status or instructor permission	Tak Yin Wong
	90.459-021	Oracle PL/SQ Development (5/24-8/19)	Wed	7:00-10:00 pm	3	P: 90.454	Leon Xia
	90.461-011	LAN/WAN Technologies	T/Th	6:00-9:05 pm	3	P: 90.267 or previous prog. experience	Jaime Fernandez
	90.461-031	LAN/WAN Technologies (5/24-8/19)	➤ Online Course		3	P: 90.267 or previous prog. experience	Ed Barnes
	90.462-041	TCP/IP and Network Architecture (Held at V.A. Medical Conference Center, Bedford, MA)	M/W	6:00-9:05 pm	3	P: 90.461	Arvind Kukreja
	90.462-031	TCP/IP and Network Architecture (5/24-8/19)	➤ Online Course		3	P: 90.461	Ed Barnes
	90.463-011	Advanced Networking Technology	M/W	7:00-10:05 pm	3	P: 90.461	Krishnajeet Putcha
	90.464-031	Network Management (5/24-8/19)	➤ Online Course		3	P: 90.461	Jaime Fernandez
Free software	90.474-021	Relational Database Concepts (5/24-8/19)	Thurs	7:00-10:00 pm	3	P: 90.267	Robert Demers
Free software	90.474-031	Relational Database Concepts (5/24-8/19)	➤ Online Course		3	P: 90.267	Paul Giguere
	90.480-031	Project-Based Information Systems (5/24-8/19)	➤ Online Course		6	P: Junior status; can be used to replace the sequence of 90.477 and 90.478	Jon Forsyth
	90.480-032	Project-Based Information Systems (5/24-8/19)	➤ Online Course		6	P: Junior status; can be used to replace the sequence of 90.477 and 90.478	Steven Tello
	90.483-041	Wireless Communications (Held at V.A. Medical Conference Center, Bedford, MA)	T/Th	6:00-9:05 pm	3	P: 90.463 or a strong background in the area of telecommunications networking	Krishnajeet Putcha
	90.486-011	MultiProtocol Label Switching (MPLS)	T/Th	7:00-10:05 pm	3	P: 90.462 or instructor permission	Jerry Nadler
*Students will not receive credit for both 90.267 and the 90.211/90.212 sequence.							
CERTIFICATE IN CLIENT/SERVER DATABASE DESIGN AND ADMINISTRATION (See page 3 for required courses.)							
CERTIFICATE IN CONTEMPORARY COMMUNICATIONS							
CERTIFICATE IN DATA/TELECOMMUNICATIONS (See page 3 for required courses.)							
CERTIFICATE IN FUNDAMENTALS OF INFORMATION TECHNOLOGY (See page 3 for required courses.)							
CERTIFICATE IN INTRANET DEVELOPMENT (See page 3 for required courses.)							
CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.)							
CERTIFICATE IN UNIX (See page 3 for required courses.)							
CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)							
Languages	50.211-011	Intermediate Conversational French I	M-Th	10:15 am-12:15 pm	3	P: 50.102 or equivalent	Joseph Garreau
	50.376-011	French Cinema and Society	M/W	7:00-10:05 pm	3	AHD; conducted in English	Joseph Garreau
	52.335-011	Cinema and Italian Americans	M-Th	10:15 am-12:15 pm	3	VCA; conducted in English	Mario Aste
	52.378-011	Italian Cinema and Culture	M-Th	8:00-10:00 am	3	VCA; conducted in English	Mario Aste
	54.101-011	Beginning Spanish I	M-Th	8:00-10:00 am	3		J. Heli Hernandez
	54.101-012	Beginning Spanish I	M/W	7:00-10:05 pm	3		Francisca Gonzalez-Arias
	54.211-011	Intermediate Conversational Spanish I	M-Th	10:15 am-12:15 pm	3	P: 54.102 or equivalent	J. Heli Hernandez
	54.211-012	Intermediate Conversational Spanish I	T/Th	7:00-10:05 pm	3	P: 54.102 or equivalent	Kimberly Vitkoski
	54.315-011	Latin American Civilization and Culture	M/W	7:00-10:05 pm	3		Javier Vargas
	54.335-011	Spanish Women Writers	T/Th	7:00-10:05 pm	3	AE	Francisca Gonzalez-Arias
CERTIFICATE IN SPANISH							



UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Legal Studies (See also Paralegal Studies)	41.262-011	Introduction to Business Law	T/Th	7:00-10:05 pm	3	BS, Collateral to Criminal Justice  Law library access required P: Minimum of three paralegal courses and permission of Prof. William Burke, Coordinator, Legal Studies; call (978) 934-2765	William Burke
	41.363-011	Corporate and Property Law	T/Th	7:00-10:05 pm	3		Eugene Reardon
	41.365-011	Legal Environment of Business	M-Th	10:15 am-12:15 pm	3		Jane McElligott
	41.367-011	Environmental Law	M/W	7:00-10:05 pm	3		William Burke
	41.376-011	Family Law	M/W	7:00-10:05 pm	3		Russell Karl
	41.381-011	Women and the Law	M/W	7:00-10:05 pm	3		Jane McElligott
	41.381-031	Women and the Law (5/24-8/19)	> Online Course		3		Jane McElligott
	41.387-031	Legal Research Methods (5/24-8/19)	> Online Course		3		Anne Corbin
	41.497-011	Paralegal Practicum	TBA	TBA	3		William Burke
CERTIFICATE IN PARALEGAL STUDIES							
Management	61.301-011	Business Finance	T/Th	6:00-9:05 pm	3	P: 60.201, 49.201, 49.202, COM filter courses, BSBA majors or Business Minor/BSIT/ASIT with 54 + credits and College of Management Dean permission	Frank Andrews
	62.201-031	Marketing Principles (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: 47.101, 48.101, 49.201; requires proctored exams	Duncan LaBay
	63.210-011	Operations Analysis Techniques	M/W	8:00-11:30 am	3	P: 49.211	M. Riaz Khan
	63.301-031	Management Information Systems (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: COM filter courses, BSBA majors or Business minor/BSIT/ASIT with 54+ credits and College of Management Dean; requires proctored exams	David Lewis
	63.407-031	Electronic Business (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: 63.307 or instructor permission and College of Management Dean permission; requires proctored exams	Luvai Motiwalla
	66.301-031	Organizational Behavior (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: COM filter courses, BSBA majors or Business minor/BSIT/ASIT with 54+ credits and College of Management Dean permission; requires proctored exams	Stuart Freedman
	66.490-011	Strategic Management	T/Th	9:00 am-12:05 pm	3	P: Graduating seniors only; BSBA students and College of Management Dean permission	Ashwin Mehta
Non-Credit Management Courses For a complete listing see Corporate Programs on page 6.							
	00.601-041	Effective Business Writing, May 13	Thurs	9:00 am-4:30 pm	NC	0.75 CEU's awarded \$300.00	Sharyn Gallagher
	00.601-042	Effective Business Writing, June 2	Wed	9:00 am-4:30 pm	NC	0.75 CEU's awarded \$300.00	Sharyn Gallagher
	00.601-043	Effective Business Writing, May 5, 12, 19	Wed	6:30-9:00 pm	NC	0.75 CEU's awarded \$200.00	Sharyn Gallagher
	00.601-044	Effective Business Writing, June 14, 21, 28	Mon	6:30-9:00 pm	NC	0.75 CEU's awarded \$200.00	Sharyn Gallagher
	00.604-041	Intro to Project Management, April 6, 13, 20, 27; May 4, 11	Tues	6:00-10:00 pm	NC	2.4 CEU's awarded \$695.00	Bernard Cookson
	00.604-042	Intro to Project Management, May 18, 19, 20	T/W/Th	9:00 am-5:00 pm	NC	2.25 CEU's awarded \$750.00	Bernard Cookson
	00.604-043	Intro to Project Management, August 3, 4, 5	T/W/Th	9:00 am-5:00 pm	NC	2.25 CEU's awarded \$750.00	Bernard Cookson
Mathematics	90.111-011*	Fundamentals of Algebra	T/Th	7:00-10:05 pm	3	P: Two years of high school algebra; Liberal Arts majors only; no credit toward a degree in science or engineering; MA MA P: 90.111 or equivalent or satisfactory score on the Math Placement Exam given the first evening of class; MA P: 90.111 or equivalent; MA; designed for students who can work independently in math; may require proctored exams P: 92.119 or 92.121 or equivalent; not for science or engineering majors; MA P: 92.119 or 92.121 or equivalent; not for science or engineering majors; MA P: 92.123; MA P: 92.125; MA MA MA P: 92.131; MA P: 92.131; MA Liberal Arts majors only; MA P: 90.111 or equivalent; MA P: 90.111 or equivalent; MA P: 90.111 or equivalent; MA P: 92.126; MA P: 92.132 P: 92.225 or 92.132 P: 92.225 or 92.132 P: 90.119 or 92.121 P: 90.119 or 92.121 P: 90.119 or 92.121; designed for students who can work independently in math; may require proctored exams P: 92.321 P: 92.183 or equivalent; MA 92.225 or 92.132 P: 92.126 or 92.132 or equivalent P: 92.221 or 92.321 P: Three semesters of calculus	Anthony Sokolowski
	92.111-011	Quantitative Reasoning	M-Th	10:15 am-12:15 pm	3		Alan Kaplan
	92.121-011**	Precalculus Mathematics	M-Th	8:00-10:00 am	3		Alan Kaplan
	92.121-012**	Precalculus Mathematics	T/Th	6:30-9:35 pm	3		Candice Weston
	92.121-031**	Precalculus Mathematics (5/24-8/19)	> Online Course		3		Alan Doerr
	92.122-011	Management Calculus	M-Th	10:15 am-12:15 pm	3		Alexander Olsen
	92.122-012	Management Calculus	M/W	6:00-9:05 pm	3		Patricia Gifford
	92.125-011	Calculus A	T/Th	6:00-9:05 pm	3		Cynthia Hill
	92.126-011	Calculus B	M/W	6:00-9:05 pm	3		Theresa Schille
	92.131-021	Calculus I (5/24-8/19)	M/W/F	8:00-10:00 am	4		John Lahoud
	92.131-022	Calculus I (5/24-8/19)	M/W/F	10:15 am-12:15 pm	4		John Lahoud
	92.132-021	Calculus II (5/24-8/19)	M/W/F	8:00-10:00 am	4		Marvin Stick
	92.132-022	Calculus II (5/24-8/19)	M/W/F	10:15 am-12:15 pm	4		Marvin Stick
	92.151-011	Explorations in Mathematics	MW	6:30-9:35 pm	3		Danielle Tarnow
	92.183-011	Introduction to Statistics	M-Th	8:00-10:00 am	3		Department Faculty
	92.183-012	Introduction to Statistics	T/Th	6:00-9:05 pm	3		Alexander Olsen
	92.183-031	Introduction to Statistics (5/24-8/19)	> Online Course		3		Ann Marie Hurley
	92.183-032	Introduction to Statistics (5/24-8/19)	> Online Course		3		Ann Marie Hurley
	92.225-011	Calculus C	T/Th	6:00-9:05 pm	3		Philip Breen
	92.231-011	Calculus III	M-F	10:15 am-12:15 pm	4		Vidhu Prasad
	92.234-011	Differential Equations (previously 92.234)	M-Th	8:00-10:00 am	3		Vidhu Prasad
	92.234-012	Differential Equations (previously 92.234)	T/Th	6:00-9:05 pm	3		Robert Johnson
	92.321-011	Discrete Structures I	T/Th	3:00-6:05 pm	3		Department Faculty
	92.321-012	Discrete Structures I	M/W	6:00-9:05 pm	3		Anthony Penta
	92.321-031	Discrete Structures I (5/24-8/19)	> Online Course		3		Alan Doerr
	92.322-011	Discrete Structures II	M-Th	10:15 am-12:15 pm	3		Alan Doerr
	92.363-011	Introduction to Data Analysis	M-Th	10:15 am-12:15 pm	3		Department Faculty
	92.386-011	Statistics for Science and Engineering	M/W	6:00-9:05 pm	3		Chittur Venkatesh
	92.407-011	Probability and Mathematical Statistics I	M/W	6:00-9:05 pm	3		Chittur Venkatesh
	92.421-011	Abstract Algebra I	M/W	6:00-9:05 pm	3		Kenneth Levasseur
	92.435-011	History of Mathematics	T/Th	6:00-9:05 pm	3		Joyce Williams
*Fundamentals of Algebra (90.111) is a preparatory course and cannot be credited toward a degree program at the University of Massachusetts Lowell. **Students will not receive credit for both 90.112 and 92.121. For students in the Information Systems Program, 92.121 can be substituted for the combination of 90.112 and 90.119. University of Massachusetts Lowell day students must have approval from their Department Chairperson before taking courses with a 90 prefix. Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. Contact the Graduate School for course listings and admissions procedures.							
Mechanical Engineering	22.211-011	Statics (alternate 14.203)	M-Th	3:00-5:00 pm	3	P: 92.132, 95.141	Faize Jamil



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Mechanical Engineering Technology</b>	23.262-031	Engineering Data Analysis (5/24-8/19)	➤ Online Course		3	P: 92.126; MS Excel or equivalent	Bradley Mingels
		CERTIFICATE IN COMPUTER-ASSISTED MANUFACTURING (See page 4 for required courses.) CERTIFICATE IN MANUFACTURING TECHNOLOGY					
<b>Multimedia Applications</b>		(See courses listed under Information Technology.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.)					
<b>Music</b>	71.102-011	Music Theory 2	M-Th	8:00-10:00 am	3	P: 71.101	Lisa Cleveland
	71.104-011	Aural Skills 2	M-Th	10:15-11:35 am	1 (2)	P: 71.103	Alan Williams
	71.201-011	Music Theory 3	M-Th	10:15 am-12:15 pm	3	For Non-Music Majors only; AE	Lisa Cleveland
	71.203-011	Aural Skills 3	M-Th	8:00-9:20 am	1 (2)	P: 71.102	Alan Williams
	74.386-011	History of Rock Music	M-Th	10:15 am-12:15 pm	3	P: 71.104	Richard Strasser
	77.499-021	Music Business Internship (5/24-8/19)	TBA	TBA	6	P: Permission of Chair	Richard Strasser
	78.493-021	Internship in Sound Recording Technology (5/24-8/19)	TBA	TBA	6	P: Permission of Chair	William Moylan
<b>Paralegal Studies (See also Legal Studies)</b>	41.363-011	Corporate and Property Law	T/Th	7:00-10:05 pm	3		Eugene Reardon
	41.376-011	Family Law	M/W	7:00-10:05 pm	3		Russell Karl
	41.387-031	Legal Research Methods (5/24-8/19)	➤ Online Course		3	Law library access required	Anne Corbin
	41.497-011	Paralegal Practicum	TBA	TBA	3	P: Minimum of three paralegal courses and permission of Prof. William Burke, Coordinator, Legal Studies; call (978) 934-2765	William Burke
		CERTIFICATE IN PARALEGAL STUDIES					
<b>Philosophy</b>	45.201-011	Introduction to Philosophy	T/Th	6:00-9:05 pm	3	VC, AHE	Donald LeBlanc
	45.201-031	Introduction to Philosophy (5/24-8/19)	➤ Online Course		3	VC, AHE; requires proctored exams	Donald LeBlanc
	45.202-011	Introduction to Logic	T/Th	7:00-10:05 pm	3	VC, AHE	Joseph Shay
	45.203-011	Introduction to Ethics	M/W	7:00-10:05 pm	3	VC, AHDE	Joseph Shay
		CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 3 for required courses.)					
<b>Physics</b>	95.103-011	General Physics I	M-Th	8:00-10:00 am	3	C: 96.103; SL	Arthur Mittler
	95.141-011	Physics I	M-F	8:00-10:00 am	3 (4)	C: 92.131, 96.141; SL	F. Raymond Hardy
	95.144-011	Physics II	M-F	8:00-10:00 am	3 (4)	P: 95.141. C: 92.132, 96.144; SL	Kunnat Sebastian
	96.103-011	General Physics I Lab (2 days/week)	T/Th	2:45-5:45 pm	1 (2)	C: 95.103 or 95.201; SL	Arthur Mittler
	96.141-011	Physics I Lab (2 days/week)	M/W	2:45-5:45 pm	1 (2)	C: 95.141; SL	F. Raymond Hardy
	96.144-011	Physics II Lab (2 days/week)	T/Th	2:45-5:45 pm	1 (2)	P: 96.141. C: 95.144; SL	David Pullen
	99.101-011	Radiation and Life	M/W	6:00-9:05 pm	3	C: 99.102; SL	Anthony Stevens
	99.102-011	Radiation and Life Lab	M/W	3:30-5:30 pm	1 (2)	Prerequisite or Corequisite: 99.101; SL	Anthony Stevens
<b>Plastics</b>	27.451-011	Selected Topics I	M/W	7:00-10:05 pm	3	P: Coordinator permission	Department Faculty
	27.453-011	Selected Topics III	T/Th	7:00-10:05 pm	3	P: Coordinator permission	Department Faculty
		NOTE: Courses with the 27 prefix are not eligible for graduate credit. CERTIFICATE IN PLASTICS ENGINEERING TECHNOLOGY					
<b>Political Science</b>	46.101-011	Introduction to American Politics	M/W	7:00-10:05 pm	3	BS	Francis Talty
	46.110-011	Introduction to Politics	M-Th	10:15 am-12:15 pm	3	BS	George Anthes
	46.348-031	Literature, Politics and Genocide in Cambodia (5/24-8/19)	➤ Online Course		3		George Chigas
	46.368-011	Middle East Politics	T/Th	7:00-10:05 pm	3	BS	Donald Leonard
<b>Psychology</b>	47.101-011	General Psychology	T/Th	7:00-10:05 pm	3	BS	Alexandria Weida
	47.101-031	General Psychology (5/24-7/23) (includes week of Fourth of July)	➤ Online Course		3	BS	Meredith Stanford-Pollock
	47.232-031	Psychology of Personality (5/24-8/19)	➤ Online Course		3	BS; requires MS Word	Joan Cannon
	47.260-011	Human Development I	M/W	6:00-9:05 pm	3	BS	Department Faculty
	47.272-011	Abnormal Psychology	T/Th	6:00-9:05 pm	3	P: 47.101; BS	Department Faculty
	47.273-011	Brain, Mind and Behavior	M-Th	8:00-10:00 am	3	P: 47.101	Mary Duell
	47.312-031	Learning and Behavior (5/24-8/19)	➤ Online Course		3	P: 47.101; BS	Charlotte Mandell
	47.328-011	Dynamics of Interpersonal Relations	M/W	6:00-9:05 pm	3	P: 47.101; BS	Noel Cartwright
	47.351-031	Human Sexuality (5/24-8/19)	➤ Online Course		3	P: 47.101; BS	Mary Duell
	47.361-011	Problem and Issues in Childhood and Adolescence	T/Th	7:00-10:05 pm	3	P: 47.101, 47.260	Department Faculty
	47.475-011	Seminar: Clinical Psychology	T/Th	2:45-5:45 pm	3	P: 47.232 or 47.272 or instructor permission	Peter Hantzis
	47.477-031	Seminar: Contemporary Trends-Addictions (5/24-8/19)	➤ Online Course		3	P: 47.101; other prerequisites may be specified by the instructor; requires MS Word	Richard Siegel
<b>Regional Economic and Social Development</b>	57.475-011	Community Conflict Resolution	T/Th	6:00-9:05 pm	3		David Turcotte
<b>Sociology</b>	48.101-011	Introduction to Sociology	M-Th	8:00-10:00 am	3	BS	Levon Chorbajian
	48.101-031	Introduction to Sociology (5/24-8/19)	➤ Online Course		3	BS	John Ost
	48.234-011	Study of Minorities	T/Th	7:00-10:05 pm	3	P: 48.101	Chris Cass
	48.260-011	Sociology of Mass Media	M/W	7:00-10:05 pm	3	P: 48.101; Human Values, BSV	Levon Chorbajian
	48.276-011	Sociology of the Gun	M/W	7:00-10:05 pm	3	P: 48.101	Chris Cass
	48.305-011	Sociology of Family Law	T/Th	7:00-10:05 pm	3	P: 48.101	Abhijit Das
<b>Technical Writing</b>	42.402-021	Software Writing (5/24-8/19)	Tues	6:00-9:00 pm	3	P: 42.401	Stephen Murphy
		CERTIFICATE IN TECHNICAL WRITING (See page 4 for required courses.) Technical Writing courses are open to undergraduate and graduate students.					
<b>Website Design and Development</b>		(See courses listed under Information Technology.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)					
<b>Women's Studies</b>	41.381-011	Women and the Law	M/W	7:00-10:05 pm	3		Jane McElligott
	41.381-031	Women and the Law (5/24-8/19)	➤ Online Course		3		Jane McElligott
	54.335-011	Spanish Women Writers	T/Th	7:00-10:05 pm	3	AE	Francisca Gonzalez-Arias
	58.340-031	Woman and Art (5/24-8/19)	➤ Online Course		3	HSA, AE	Liana Cheney



## July 12–August 19 Summer Session II

**Day Classes** begin on July 12 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.

**M/W Evening Classes** begin on July 12 and include 2 FRIDAYS: July 23 and August 6 at the regularly scheduled hours.

**T/Th Evening Classes** begin on July 13 and include 2 FRIDAYS: July 30 and August 13 at the regularly scheduled hours.

*Reminder: This course listing combines the University of Massachusetts Lowell day school courses and the continuing studies courses. It is important to check course numbers and prerequisites to ensure enrollment in the correct class.*

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Accounting</b>	60.202-021	Accounting/Managerial	T/Th	6:00-9:00 pm	3	P: 60.201	Lisa Andrusaitis
	60.331-021	Cost Management Systems	T/Th	6:00-9:00 pm	3	P: 60.202, BSBA students (non-Accounting majors) and College of Management Dean permission	Jeffrey Mead
<b>Art/Computer Graphics</b>	<b>NEW LAB!</b> 70.245-021	Desktop Publishing: Quark XPress/Macintosh	M/W	6:30-9:30 pm	3	P: Basic Macintosh proficiency	Alison Poor-Donahue
	70.262-021	Digital Imaging and Photography: Photoshop/Windows®	M/W	6:30-9:30 pm	3	P: Basic Windows proficiency	Ella Carlson
	70.379-021	Website Design: Dreamweaver®/Windows	T/Th	7:00-10:00 pm	3	P: 90.238, and 90.231 or 70.262	Chris Perry
	70.384-021	Advanced Website Design and Development/Windows	M/W	6:30-9:30 pm	3	P: 90.238 and 70.379	Chris MacDonald
NOTE: While the above courses will not directly transfer into the Art Department's Bachelor of Fine Arts Day School degree program, certain two-course clusters may be accepted for transfer upon prior department approval. CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 4 for required courses.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)							
<b>Art History</b>	58.494-021	Directed Studies	TBA	TBA	3	P: Art History Coordinator permission	Liana Cheney
	58.496-021	Practicum in Art History	TBA	TBA	3	P: Art History Coordinator permission	Liana Cheney
<b>Chemistry</b>	84.112-021	General Chemistry II	M-Th	10:15 am-12:15 pm	3	P: 84.111 or permission of instructor; C: 84.114; SL	Judith Goldsberry
	84.114-021	General Chemistry II Lab	M/W/Th	2:45-5:45 pm	1 (3)	P: 84.113 or permission of instructor; C: 84.112; SL	Athena Letsou
	84.122-021	Chemistry II	M/W	7:00-10:00 pm	3	P: 84.121 and 84.123. C: 84.124; SL	Judith Goldsberry
	84.124-021	Chemistry Lab II	T/Th	7:00-10:00 pm	1 (3)	P: 84.123; C: 84.122; SL	Paul Damour
	84.222-021	Organic Chemistry II	M/T/Th	2:45-5:15 pm	3	P: 84.221. C: 84.230; SL	Gene Davis
	84.222-022	Organic Chemistry II	T/Th	7:00-10:00 pm	3	P: 84.221. C: 84.230; SL	Gene Davis
	84.230-021	Organic Chemistry Lab II A	T/Th	6:00-10:00 pm	1 (4)	P: 84.229; C: 84.222; SL	Judith Freeman
<b>Cinema</b>	50.378-021	Images of Women in French Cinema	M/W	7:00-10:00 pm	3	AHD; conducted in English	Joseph Garreau
	52.374-021	Classics of Italian Cinema	M-Th	10:15 am-12:15 pm	3	VCA; conducted in English	Mario Aste
	52.380-021	Italian Cinema: Directors and Themes	M-Th	8:00-10:00 am	3	VCA; conducted in English	Mario Aste
<b>Civil and Environmental Engineering</b>	14.204-021	Strength of Materials (alternate 22.212)	M-Th	8:00-10:00 am	3	P: 14.203	Faize Jamil
	14.205-021	Dynamics (alternate 22.213)	M/W	7:00-10:00 pm	3	P: 14.203, 92.132	Faize Jamil
<b>Client/Server Technology</b>	(See courses listed under Information Technology) CERTIFICATE IN CLIENT/SERVER DATABASE DESIGN AND ADMINISTRATION (See page 3 for required courses.)						
<b>Computer Science</b>	91.113-021	Exploring the Internet	M/W	6:00-9:00 pm	3	Non-CS Majors only	Peter Weston
<b>Criminal Justice (See also Paralegal Studies)</b>	44.221-021	Criminology	T/Th	6:00-9:00 pm	3		Claire Murphy
	44.261-021	Juvenile Delinquency	M/W	6:00-9:00 pm	3		Steven Sacco
	44.360-041	Gender, Race, and Crime (Held at V.A. Medical Conference Center, Bedford, MA)	M/W	6:00-9:05 pm	3		Allan Roscoe
	44.496-021	Practicum	TBA	TBA	3	P: Instructor permission	Allan Roscoe
CERTIFICATE IN COMMUNITY POLICING CERTIFICATE IN SECURITY MANAGEMENT AND HOMELAND SECURITY (See page 4 for required courses.) CERTIFICATE IN PARALEGAL STUDIES							
<b>Cultural Studies</b>	<b>NEW!</b> 59.217-011	Media, Perception and Culture in 20th Century America	T/Th	7:00-10:00 pm	3		Mark Walters
<b>Economics</b>	49.201-021	Economics I (Microeconomics)	M-Th	8:00-10:00 am	3	P: 90.111; BS	Ronald Olive
	49.201-022	Economics I (Microeconomics)	T/Th	6:00-9:00 pm	3	P: 90.111; BS	Ronald Olive
	49.202-021	Economics II (Macroeconomics)	M/W	7:00-10:00 pm	3	P: 90.111; BS	Patricia Machado
	49.211-021	Statistics I	M/W	6:00-9:00 pm	3	P: 92.122 or equivalent	Harjeet Khosla
<b>Electrical and Computer Engineering</b>	16.202-021	Circuit Theory II	T/Th	9:15 am-12:15 pm	3	P: 16.201; C: 16.208	Tenneti Rao
	16.208-021	Basic EE II Laboratory	T/Th	4:00-7:00 pm	2 (3)	P: 16.207; C: 16.202	Frank Tredeau
	16.312-021	Electronics II Laboratory	W/Th	4:00-7:00 pm	2 (3)	P: 16.311; C: 16.366	Alan Rux
	16.360-021	Electromagnetic Theory I	M/W	2:00-5:00 pm	3	P: 16.202	Dikshitulu Kalluri
	16.362-021	Signals and Systems I	T/Th	2:00-5:00 pm	3	P: 16.202, 92.236	Mufeed Mah'd
	16.363-021	Signals and Systems II	T/Th	2:00-5:00 pm	3	P: 16.362	Oliver Ibe
	16.366-021	Electronics II	T/Th	9:00 am-Noon	3	P: 16.365; C: 16.312	Mufeed Mah'd
	16.412-021	Directed Studies	TBA	TBA	3		Ziyad Salameh
<b>English</b>	42.101-021	College Writing I	M/W	7:00-10:00 pm	3		Stephen Lucasi
	42.102-021*	College Writing II	M-Th	10:15 am-12:15 pm	3	P: 42.101	Mary Hojnacki
	42.102-022*	College Writing II	T/Th	7:00-10:00 pm	3	P: 42.101	Henry Venuti
	42.104-021*	College Writing II for International Students	M/W	7:00-10:00 pm	3	P: 42.103; English composition requirement	Rita Naughton
	42.212-021	The Short Story	M-Th	8:00-10:00 am	3	P: 42.102; LT	Dina Bozicas
	42.217-021	The Horror Story	T/Th	7:00-10:00 pm	3	P: 42.102; LT	Deborah Wolflein
	42.224-021**	Business Writing	M/W	6:00-9:00 pm	3	P: 42.102	Peter Payack
	42.226-021	Technical and Scientific Communication	T/Th	7:00-10:00 pm	3	P: 42.102	Peter Payack
	42.232-021	Turning Fiction Into Film	M-Th	10:15 am-12:15 pm	3	P: 42.102; LT	Madeline Sherlock
	42.295-021	History of American Literature II	M/W	7:00-10:00 pm	3	P: 42.102; LT	Henry Venuti
	42.303-021	Creative Writing: Poetry	M/W	7:00-10:00 pm	3	P: 42.102	Lilly Roberts
	*Students will not receive credit for both 42.102 and 42.104.						
	**Students will not receive credit for both 42.224 and 42.226.						



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Graphic Design and Digital Imaging</b>	(See courses listed under Art and Information Technology.) CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 4 for required courses.)						
<b>Health Professions</b>	30.305-021	Exercise Physiology Lecture	M-F	8:00-10:00 am	4	P: Anatomy and Physiology, Chemistry; Physiology majors; SL	Department Faculty
	30.307-021	Exercise Physiology Lab	M/W/Th	10:15am-12:15 pm	1 (3)		Department Faculty
	35.102-021	Human Anatomy and Physiology II	T/Th	6:15-9:15 pm	3	P: 35.101, 35.103 (or equiv.); C: 35.104; SL	Paul Fierimonte
	35.104-021	Human Anatomy & Physiology II Lab	T/W/Th	2:00-5:00 pm	1 (3)	P: 35.101, 35.103; C: 35.102; SL	Alease Bruce
	35.207-021	Fitness and Nutrition	T/Th	6:00-9:00 pm	3		Allison Sigler
	35.211-021	Basic Clinical Microbiology and Pathology	M-Th	5:00-7:00 pm	3	P: Anatomy and Physiology	Department Faculty
	35.213-021	Basic Clinical Microbiology and Pathology Lab	M-Th	7:00-9:00 pm	1 (3)	C: 35.211	Department Faculty
	CERTIFICATE IN NUTRITION						
<b>History (See also Art History)</b>	43.106-021	The Modern World	T/Th	6:00-9:00 pm	3	HS	Robert Lemire, Jr.
	43.112-021	U.S. History Since 1877	M/W	7:00-10:00 pm	3	HS	Diane Lewis
<b>Information Technology (Including Multimedia and Graphics)</b>	90.160-021	Introduction to Information Systems	T/Th	6:00-9:00 pm	3		Christopher Gambon
	90.202-021	Introduction to PCs & MS Office	M/W	6:00-9:00 pm	3		Edward Mowrey
	90.211-021*	Intro. to Programming with C - Part I	M/W	7:00-10:00 pm	3	No previous prog. experience required	Helen Wang
	90.212-021*	Intro. to Programming with C - Part II	T/Th	7:00-10:00 pm	3	P: 90.211	James Brzowski
	90.220-021	Visual Basic®	T/Th	7:00-10:00 pm	3		Leo Javits
	90.238-021	Web Development: Front Page/Windows	T/Th	7:00-10:00 pm	3	P: 90.291; 90.231 recommended	Jamie Manning
	90.267-021*	C Programming	T/Th	6:00-9:00 pm	3	P: Previous programming experience	Nancy Kiernan
	90.268-021	C++ Programming	M/W	7:00-10:00 pm	3	P: 90.267 or 90.212	Department Faculty
	90.271-021	C# (C Sharp)	T/Th	7:00-10:00 pm	3	P: 90.268 or 90.301	James Brzowski
	90.291-021	Introduction to DHTML	M/W	6:30-9:30 pm	3		David Sciuto
	90.297-021	Introduction to Java Programming	T/Th	6:00-9:00 pm	3	P: Previous prog. experience required	Peter Weston
	90.301-021	Java™ Programming/Windows	M/W	7:00-10:00 pm	3	P: 90.297 or 90.268	Elizabeth Kramer
	90.305-021	Introduction to Perl	T/Th	7:00-10:00 pm	3	P: 90.267	Jonathan Worthley
	90.312-021	UNIX® Shell Programming	M/W	7:00-10:00 pm	3	P: 90.311, and 90.267 or 90.212	Michael Richards
	90.313-021	UNIX Internals	M/W	7:00-10:00 pm	3	P: 90.312	Partha Mittra
	90.443-021	Fundamentals of Client/Server Computing	M/W	6:00-9:00 pm	3		Umesh Bhargava
	90.461-021	LAN/WAN Technologies	M/W	7:00-10:00 pm	3	P: 90.267 or previous prog. experience	Krishnajeet Putcha
	90.462-021	TCP/IP and Network Architecture	M/W	6:00-9:00 pm	3	P: 90.461	Arvind Kukreja
	90.474-021	Relational Database Concepts	T/Th	6:00-9:00 pm	3	P: 90.267	Umesh Bhargava
	*Students will not receive credit for both 90.267 and the 90.211/90.212 sequence. CERTIFICATE IN CLIENT/SERVER DATABASE DESIGN AND ADMINISTRATION (See page 3 for required courses.) CERTIFICATE IN CONTEMPORARY COMMUNICATIONS CERTIFICATE IN DATA/TELECOMMUNICATIONS (See page 3 for required courses.) CERTIFICATE IN FUNDAMENTALS OF INFORMATION TECHNOLOGY (See page 3 for required courses.) CERTIFICATE IN INTRANET DEVELOPMENT (See page 3 for required courses.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.) CERTIFICATE IN UNIX (See page 3 for required courses.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)						
<b>Languages</b>	50.212-021	Intermediate Conversational French II	M-Th	10:15 am-12:15 pm	3	P: 50.211 or equivalent	Joseph Garreau
	52.374-021	Classics of Italian Cinema	M-Th	10:15 am-12:15 pm	3	VCA; conducted in English	Mario Aste
	52.380-021	Italian Cinema: Directors and Themes	M-Th	8:00-10:00 am	3	VCA; conducted in English	Mario Aste
	54.102-021	Beginning Spanish II	M-Th	8:00-10:00 am	3	P: 54.101 or equivalent	J. Heli Hernandez
	54.102-022	Beginning Spanish II	M/W	7:00-10:00 pm	3	P: 54.101 or equivalent	Francisca Gonzalez-Arias
	54.211-012	Intermediate Conversational Spanish I	T/Th	7:00-10:00 pm	3	P: 54.102 or equivalent	Francisca Gonzalez-Arias
	54.212-021	Intermediate Conversational Spanish II	M-Th	10:15 am-12:15 pm	3	P: 54.211 or equivalent	J. Heli Hernandez
	54.212-022	Intermediate Conversational Spanish II	T/Th	7:00-10:00 pm	3	P: 54.211 or equivalent	Kimberly Vitckoski
	CERTIFICATE IN SPANISH						
<b>Legal Studies (See also Paralegal Studies)</b>	41.370-021	Real Estate Law	M/W	7:00-10:00 pm	3		J. Alan Roberts
	41.376-021	Family Law	T/Th	7:00-10:00 pm	3		Ellen Curran
	41.381-021	Women and the Law	M/W	7:00-10:00 pm	3		Nancy Dick
	41.387-021	Legal Research Methods	T/Th	7:00-10:00 pm	3		Nancy Dick
	CERTIFICATE IN PARALEGAL STUDIES						
<b>Management</b>	61.300-021	Investments	T/Th	6:00-9:00 pm	3	P: COM Filter courses, Junior standing and College of Management Dean permission	Frank Andrews
	61.301-021	Business Finance	M/W	9:00 am-Noon	3	P: 60.202, 49.201, 49.202, COM filter courses, BSBA majors or Business Minor/BSIT/ASIT with 54 + credits and College of Mgmt. Dean permission	Frank Andrews
<b>Non-Credit Management Courses</b> For a complete listing see Corporate Programs on page 6.							
	00.604-043	Project Management Training, August 3, 4, 5	T/W/Th	9:00 am-5:00 pm	NC	2.25 CEU's awarded \$750.00	Bernard Cookson
<b>Mathematics</b>	90.111-021*	Fundamentals of Algebra	M/W	7:00-10:00 pm	3		Eugene Welch, Jr.
	92.121-021**	Precalculus Mathematics	M-Th	8:00-10:00 am	3	P: 90.111 or equivalent; Placement Exam given the first week of class; MA	Alan Kaplan
	92.121-022**	Precalculus Mathematics	M/W	6:30-9:30 pm	3	P: 90.111 or equivalent; Placement Exam given the first week of class; MA	Candice Weston
	92.122-021	Management Calculus	M-Th	10:15 am-12:15 pm	3	P: 90.119 or 92.121 or equivalent; not for science or engineering majors; MA	Patricia Gifford
	92.123-021	Precalculus Mathematics II	T/Th	7:00-10:00 pm	3	P: 92.121; MA	Terence Watterson
	92.125-021	Calculus A	T/Th	7:00-10:00 pm	3	P: 92.123; MA	Alan Kaplan
	92.126-021	Calculus B	M/W	7:00-10:00 pm	3	P: 92.125; MA	Theresa Schille
	92.127-021	Preparation for Calculus	T/Th	6:00-9:30 pm	4	MA	Cynthia Hill
	92.127-022	Preparation for Calculus	M-F	8:00-10:00 am	4	MA	Cynthia Hill
	92.183-021	Introduction to Statistics	M-Th	8:00-10:00 am	3	P: 90.111 or equivalent; MA	Alexander Olsen
	92.183-022	Introduction to Statistics	M/W	7:00-10:00 pm	3	P: 90.111 or equivalent; MA	Alexander Olsen
	92.231-021	Calculus III	M-F	10:15 am-12:15 pm	4	P: 92.132; MA	Department Faculty
	92.321-021	Discrete Structures I	M/W	6:00-9:00 pm	3	P: 90.112 or 92.121	Department Faculty
	92.386-021	Statistics for Science and Engineering	M/W	6:00-9:00 pm	3	P: 92.225 or 92.132	Department Faculty
	92.427-021	Geometry	M/W	2:00-5:30 pm	3	P: 92.221 or 92.321	Marvin Stick
	92.450-021	Mathematical Modeling	T/Th	6:00-9:00 pm	3	P: 92.234	James Graham-Eagle
	*Fundamentals of Algebra (90.111) is a preparatory course and cannot be credited toward a degree program at the University of Massachusetts Lowell. **Students will not receive credit for both 90.112 and 92.121. For students in the Information Systems Program, 92.121 can be substituted for the combination of 90.112 and 90.119. University of Massachusetts Lowell day students must have approval from their Department Chairperson before taking courses with a 90 prefix. Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. Contact the Graduate School for course listings and admissions procedures.						



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Mechanical Engineering</b>	22.212-021 22.213-021	Strength of Materials Dynamics (alternate 14.205)	M-Th M/W	8:00-10:00 am 7:00-10:00 pm	3 3	P: 22.211 P: 22.211, 92.231	Faize Jamil Faize Jamil
<b>Multimedia Applications Mechanical Technology</b>	(See courses listed under Information Technology.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.)						
<b>Music</b>	71.110-021 71.202-021 71.204-021 78.201-021  78.301-021	Basic Music Theory Music Theory 4 Aural Skills 4 Introduction to Audio for Multimedia and the Web - Featuring Sound Forge 6.0/Windows Music, Technology and Society	M-Th M-Th M-Th T/Th  M-Th	8:00-10:00 am 10:15 am-12:15 pm 12:30-1:50 pm 7:00-10:00 pm  10:15 am-12:15 pm	3 3 1 (2) 3  3	For Non-Music Majors only; AE P: 71.201 P: 71.203 P: Intro to Multimedia or HTML recommended  AH	Lisa Cleveland Lisa Cleveland Alan Williams Alex Case  Alan Williams
<b>Paralegal Studies (See also Criminal Justice and Legal Studies)</b>	41.370-021 41.387-021	Real Estate Law Legal Research Methods CERTIFICATE IN PARALEGAL STUDIES	M/W T/Th	7:00-10:00 pm 7:00-10:00 pm	3 3		J. Alan Roberts Nancy Dick
<b>Philosophy</b>	45.201-021 45.203-021	Introduction to Philosophy Introduction to Ethics CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 3 for required courses.)	M/W T/Th	7:00-10:00 pm 7:00-10:00 pm	3 3	VC, AHE VC, AHDE	Michael Koran Joseph Shay
<b>Physics</b>	95.104-021 95.141-021 95.144-021 96.104-021  96.141-021 96.144-021 99.101-021 99.102-021	General Physics II Physics I Physics II General Physics II Lab (2 days per week) Physics I Lab Physics II Lab (2 days per week) Radiation and Life Radiation and Life Lab	M-Th M-F M-F T/Th  M/W T/Th M/W M/W	8:00-10:00 am 10:15 am-12:15 pm 10:15 am-12:15 pm 2:45-5:45 pm  2:45-5:45 pm 2:45-5:45 pm 6:00-9:00 pm 3:30-5:30 pm	3 (4) (4) 1 (2)  1 2 1 2 3 1 2	P: 95.103; C: 96.104; SL C: 92.131; 96.141; SL P: 95.141; C: 92.132, 96.144; SL P: 96.103; C: 95.104 or 95.202; SL  C: 95.141; SL P: 96.141; C: 95.144; SL C: 99.102; SL P: or C: 99.101; SL	Edward Salesky Edward Salesky Roger McLeod Department Faculty  Department Faculty David Pullen Anthony Stevens Anthony Stevens
<b>Plastics</b>	27.452-021 27.454-021	Selected Topics II Selected Topics IV NOTE: Courses with the 27 prefix are not eligible for graduate credit. CERTIFICATE IN PLASTICS ENGINEERING TECHNOLOGY	M/W T/Th	7:00-10:00 pm 7:00-10:00 pm	3 3	P: Coordinator permission P: Coordinator permission	Department Faculty Department Faculty
<b>Political Science</b>	46.101-021 46.112-021  46.121-021	Introduction to American Politics Introduction to Comparative Political Systems Introduction to International Relations	M-Th T/Th  M/W	10:15 am-12:15 pm 7:00-10:00 pm  7:00-10:00 pm	3 3  3	BS BS  BS	George Anthes Donald Leonard  Tracy LaFauci
<b>Psychology</b>	47.101-021 47.335-021	General Psychology Psychology and Women	M/W T/Th	7:00-10:00 pm 6:00-9:00 pm	3 3	BS BSV	Ann MacGibbon Cynthia Jacobs
<b>Sociology</b>	48.101-021 <b>NEW!</b> 48.111-021 48.340-021	Introduction to Sociology Sociology Through Literature Sociology of Sports	M-Th M-Th M/W	8:00-10:00 am 10:15 am-12:15 pm 7:00-10:00 pm	3 3 3	BS 3 P: 48.101	Levon Chorbajian William Lekas Levon Chorbajian
<b>Website Design and Development</b>	CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)						
<b>Women's Studies</b>	41.381-021 47.335-021 50.378-021	Women and the Law Psychology and Women Images of Women in French Cinema	M/W T/Th M/W	7:00-10:00 pm 6:00-9:00 pm 7:00-10:00 pm	3 3 3	BSV AHD; conducted in English	Nancy Dick Cindy Jacobs Joseph Garreau

## note:

Day students in the Class of 2004 and subsequent classes — Please visit our Website at <http://continuinged.uml.edu> to see if the course you are registering for fulfills the General Education 2000 Requirements.

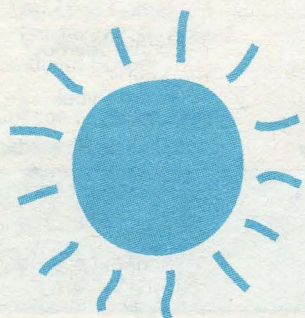
INTRODUCING

2

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## Did you know

### THAT YOU COULD TAKE UMASS LOWELL COURSES IN BEDFORD, MA ?

It's never been more convenient to advance your professional education! The University of Massachusetts Lowell has a satellite center at the V.A. Medical Conference Center facility in Bedford, Mass. The University offers a broad array of courses in their state-of-the-art classrooms and labs.

#### Satellite Center

#### Summer 2004 Courses Held at Bedford, MA, V.A. Medical Conference Center

##### SUMMER I

##### INFORMATION TECHNOLOGY UNDERGRADUATE

##### TCP/IP and Network Architecture

Arvind Kukreja  
Course: 90.462-041  
Pre-requisite: 90.461  
Mon/Wed 6:00 pm – 9:05 pm

##### Technical & Scientific Communication

Peter Payack  
Course: 42.226-041  
Tue/Thur 6:00 pm – 9:05 pm

##### C Programming

Nancy Kiernan  
Course: 90.267-041  
Mon/Wed 6:00 pm – 9:05 pm

##### Wireless Communications

Krishnaje Putha  
Course: 90.483-041  
Prerequisite: 90.463 or permission  
Tue/Thur 6:00 pm – 9:05 pm

##### SUMMER II

##### Criminal Justice Undergraduate

##### Gender, Race and Crime

Alan Roscoe  
Course: 44.360-041  
Mon/Wed 6:00 pm – 9:05 pm

For more information, contact: Jacqueline Hawk 978-934-2141 [Jacqueline\\_Hawk@uml.edu](mailto:Jacqueline_Hawk@uml.edu)



# GRADUATE COURSE LISTINGS

## Graduate Courses Summer Session I

Except as noted: Day classes begin on May 24.  
M/W Evening Classes begin on May 24 and include 2 FRIDAYS: June 4 and June 18 at the regularly scheduled hours.  
T/Th Evening Classes begin on May 25 and include 2 FRIDAYS: June 11 and June 25 at the regularly scheduled hours.

Reminder: It is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Business Administration	60.501-031	Financial Accounting (5/24-7/16) (includes week of Fourth of July)	> Online Course		2	P: MBA Program or permission of MBA Director; requires proctored exams	Charles Feeney
	60.730-011	Federal Taxation (5/24-6/30)	T/Th	6:00-10:00 pm	3	P: MBA Foundation Core or perm. of MBA Director	Charles Feeney
	61.501-031	Business Finance (5/24-7/16) (includes week of Fourth of July)	> Online Course		2	P: 60.501; MBA Program or permission of MBA Director; requires proctored exams	Yash Puri
	61.691-031	International Finance (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: MBA Foundation Core or permission of MBA Director	Yash Puri
	62.501-031	Marketing Fundamentals (5/24-7/16) (includes week of Fourth of July)	> Online Course		2	P: MBA program or permission of MBA Director	Duncan LaBay
	63.501-031	Operations Fundamentals (5/24-7/16) (includes week of Fourth of July)	> Online Course		2	P: MBA Program or permission of MBA Director; requires proctored exams	Riaz Khan
	63.601-031	Management Information Systems (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: MBA Foundation Core or permission of MBA Director; requires on-campus presentations and may require proctored exams	Luvai Motiwalla
	64.601-031	Operations Management (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: MBA Foundation Core or permission of MBA Director	David Lewis
	66.501-031	Organizational Behavior (5/24-7/16) (includes week of Fourth of July)	> Online Course		2	P: MBA Program or permission of MBA Director	Stuart Freedman
	66.511-031	Global Enterprise and Competition (5/24-7/16) (includes week of Fourth of July)	> Online Course		2	P: MBA Program or permission of MBA Director	Bernard Cookson
	66.691-031	Strategy (5/24-7/16) (includes week of Fourth of July)	> Online Course		3	P: MBA Advanced Core or permission of MBA Director	Valerie Kijewski
	66.725-011	Negotiations (5/24-6/30)	M/W	6:00-10:00 pm	3	P: MBA Foundation Core or perm. of MBA Director	Timm Kainen
	Courses are open to College of Management certificate students and students matriculated in the University of Massachusetts Lowell MBA Program. Courses also are available to non-UML students who are currently enrolled in other AACSB-accredited Master's programs, and who have the required prerequisites and permission of the MBA Director.						
Computer Science	91.500-021	Fundamentals of Computer Science (5/24-8/26)	Fri	6:00-9:00 pm	3		Lee Jones
	91.503-021	Algorithms (5/24-8/26)	TBA	TBA	3	Graduate C.S. Coordinator permission	Department Faculty
	91.516-021	Operating Systems II (5/24-8/26)	Wed	5:30-8:35 pm	3	Graduate C.S. Coordinator permission	William Moloney, Jr.
Criminal Justice	44.503-031	Administration of Justice (5/24-8/19)	> Online Course		3		Larry Siegel
	44.542-031	Criminal Profiling (5/24-8/19)	> Online Course		3		Allan Roscoe
	44.543-031	Forensic Psychology (5/24-8/19)	> Online Course		3		Alexandria Weida
	44.563-031	Criminal Justice and Substance Abuse (5/24-8/19)	> Online Course		3		David Orrick
	44.580-031	Quantitative Methods (5/24-8/19)	> Online Course		3		Donald Hummer
	44.590-031	Research Methods (5/24-8/19)	> Online Course		3		Donald Hummer
	44.622-031	Family Violence (5/24-8/19)	> Online Course		3		Eve Buzawa
Education	01.616-031	Issues in Sociology of Education (5/24-8/19)	> Online Course		3		William Phelan
	01.630-031	Diversity Issues for School Leaders (5/24-8/19)	> Online Course		3		Maura Ammendolia
	04.636-031	Theory and Research in Curriculum (5/24-8/19)	> Online Course		3		J. Lebaron, P. Gimbel
	05.623-031	School Law (5/24-8/19)	> Online Course		3		Patricia Anthony
	05.642-031	Principles of Supervision (5/24-8/19)	> Online Course		3		Robert Gower
	05.643-031	The Principalship (5/24-8/19)	> Online Course		3		Charles Christensen
	NEW! 06.522-031	Young Adult Literature (5/24-8/19)	> Online Course		3		Denise Marchionda
	NEW! 06.527-031	Language Acquisition (5/24-8/19)	> Online Course		3		Jo Ann Brewer
	NEW! 06.531-031	Organization and Supervision of Reading and Language (5/24-8/19)	> Online Course		3		William Harp
	07.642-031	Program Evaluation (5/24-8/19)	> Online Course		3		B. Jochums-Slez
Electrical and Computer Engineering	16.508-021	Quantum Electronics for Engineers (5/24-7/30)	*T/Th	6:00-8:00 pm	3	P: 16.461	Craig Armiento
	16.521-021	Real Time D.S.P. (5/24-7/30)	*M/W	6:00-8:00 pm	3	P: 16.317	Mufeed Mah'd
	16.528-011	Alternate Energy Sources	M/W	6:00-9:05 pm	3	P: Instructor permission	Ziyad Salameh
	16.529-011	Electric Vehicle Technology	T/Th	6:00-9:05 pm	3	P: Instructor permission	Ziyad Salameh
	16.574-021	Advanced Logic Design (5/24-7/30)	*T/Th	6:00-8:00 pm	3	P: 16.265	Anh Tran
	16.575-021	Verification of Very Large Digital Designs	T/Th	6:00-9:05 pm	3	P: HDL or instructor permission	James Moran
	16.584-021	Probability and Random Processes (5/24-7/30)	*T/Th	6:00-8:00 pm	3	P: 16.362	Lee Jones
	16.593-021	Industrial Experience	TBA	TBA	0		Ziyad Salameh
	16.608-021	Scattering and Diffraction of Electromagnetic Waves (5/24-7/30)	*T/Th	6:00-8:00 pm	3	P: 16.507 or equivalent	Tenneti Rao
	16.666-021	Storage Area Networks (5/24-7/30)	*M/W	6:00-8:00 pm	3	P: 16.583	Oliver Ibe
*Ten-week Electrical Engineering classes are scheduled from May 24 to July 30. Mon./Wed. classes include an additional class on Friday, June 25. All other classes are scheduled from May 24 to June 30.							
Health Professions	34.650-021	Clinical Education Experience I (5/31-7/23)	M-F	8:00 am-4:00 pm	3 (4)	P: First-year Physical Therapy graduate students only	Department Faculty
	34.652-021	Clinical Education Experience II (6/28-8/20)	M-F	8:00 am-4:00 pm	3	P: Clinical Education Experience I, second-year Physical Therapy graduate students only	Department Faculty
	34.701-011	Noncredit Portfolio Assessment for Transitional Doctorate in Physical Therapy (tDPT)	Non-credit course		0		Department Faculty
	34.702-031	Clinical Reasoning in Physical Therapy (5/24-8/19)	> Online Course		3	P: Admittance into tDPT; req. MS Word	Connie Seymour
	34.704-031	Healthcare Issues: Impact on Clinical Practice (5/24-8/19)	> Online Course		3	P: Admittance into tDPT; req. MS Word	Gerard Dybel
	36.613-031	Infectious Disease (5/24-8/19)	> Online Course		3	P: One semester of General Microbiology	S. Fessia-Richardson
Mathematics	92.500-011	Discrete Structures	T/Th	3:00-6:05 pm	3		Department Faculty
	92.509-021	Probability, Statistics and Random Processes (5/24-7/30)	T/Th	6:00-8:00 pm	3	P: 3 semesters of calculus; some familiarity with matrices; check prereqs.	Lee Jones
	92.521-011	Algebraic Structures	M/W	6:00-9:05 pm	3	P: Linear Algebra or Discrete Structures	Kenneth Levasseur
	92.535-011	History of Mathematics	T/Th	6:00-9:05 pm	3	P: Calculus	Joyce Williams
Mechanical Engineering	22.512-031	Applied Finite Elements (5/24-8/19)	> Online Course		3	P: Requires instructor permission; access to a PC; \$100 course fee for software; optional on-campus course orientation: May 24, 6:00 pm	James Sherwood
Music	73.510-021	Foundations of Music Education (5/24-8/19) For additional Summer Music Graduate Education courses, please see Summer Session II.	Tues	5:00-8:00 pm	3		Donna Nagle
Psychology	47.533-011	Mental Health Problems in the Community	T/Th	6:00-9:05 pm	3	P: Open to senior students with instructor permission	Peter Hantzis
	47.536-031	Forensic Psychology (5/24-8/19)	> Online Course		3		Alexandria Weida
Regional Economic and Social Develop.	57.512-011	Community Conflict Resolution	T/Th	6:00-9:05 pm	3		David Turcotte
Work Environment	19.559-011	Conflict Resolution	T/Th	6:00-9:05 pm	3		David Turcotte



# Graduate Courses Summer Session II

Except as noted: Day classes begin on July 12.  
M/W Evening Classes begin on July 12 and include 2 FRIDAYS: July 23 and August 6 at the regularly scheduled hours.  
T/Th Evening Classes begin on July 13 and include 2 FRIDAYS: July 30 and August 13 at the regularly scheduled hours.

Reminder: It is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Business Administration	61.610-021	Special Topics: Financial Markets and Monetary Policy	T/Th	6:00-9:00 pm	3	P: MBA Foundation Core or permission of MBA Director	Michael Carter
	62.601-031	Analysis of Customers and Markets (7/12-8/24)	Online Course		3	P: MBA Foundation Core or permission of MBA Director	Eunsang Yoon
Courses are open to College of Management certificate students and students matriculated in the University of Massachusetts Lowell MBA Program. Courses also are available to non-UML students who are currently enrolled in other AACSB-accredited Master's programs, and who have the required prerequisites and permission of the MBA Director							
Electrical and Computer Engineering	16.593-021	Industrial Experience	TBA	TBA	0		Ziyad Salameh
Health Professions	34.701-021	Noncredit Portfolio Assessment for Transitional Doctorate in Physical Therapy (tDPT)	Non-credit course		0		Department Faculty
Mathematics	92.527-021	Geometry	M/W	2:00-5:30 pm	3	Course is generally applicable only to the Teacher Option	Marvin Stick
	92.550-021	Mathematical Modeling	T/Th	6:00-9:00 pm	3		James Graham-Eagle
Music	73.573-021	Orff Level I (7/19-7/23 and 7/26-7/30)	M-F	9:00 am-4:00 pm	3		Ruth Debrot/Pam Yanco
	73.576-021	Finale Workshop (8/4-8/6)	W/Th/F	9:00 am-4:00 pm	2		Dan Lutz
	73.577-021	Instrumental Music Workshop (8/11-8/13)	W/Th/F	9:00 am-4:00 pm	2		Debra-Nicole Huber
	73.578-021	Music As A Way of Knowing (7/26-7/30)	M-F	9:00 am-4:00 pm	3		Nick Page
	73.579-021	World Percussion Ensemble (8/9-8/11)	M/T/W	9:00 am-4:00 pm	2		Dan Foote
	73.581-021	The Opera Connection (8/18-8/20)	W/Th/F	9:00 am-4:00 pm	2		Mark Caruso
	73.582-021	Making Music Videos: An Engaging Assessment Tool (8/16-8/18)	M/T/W	9:00 am-4:00 pm	2		Gena Greher
	NEW! 73.583-021	Introduction to Technology Applications for the Music Classroom (7/26-7/30)	M-F	9:00 am-4:00 pm	3		Wayne Spletstoeszer
Regional Economic and Social Develop.	57.535-021	Community-Based Planning	M/W	5:30-8:30 pm	3		Brenda Bond
	57.605-021	Social Movements and Empowerment	T/Th	6:00-9:00 pm	3		John MacDougall
Work Environment	19.665-021	Social Movements and Empowerment	T/Th	6:00-9:00 pm	3		John MacDougall

## GENERAL INFORMATION

### General Information

### Registration Information

### REGISTER EARLY

**Get a head start and register early!** Although we cannot guarantee an opening in any class, your chances for being enrolled in the course of your choice are better when you register early. Please note that seats in laboratory courses are limited.

#### Office Hours

Advising Center, Southwick Hall 225  
Monday-Friday: 8:30 am-5:00 pm

Enrollment Services/Continuing Studies and Corporate Education, Southwick Hall 223  
Monday-Thursday: 8:30 am-8:30 pm  
Friday: 8:30 am-5:00 pm

#### Holiday Hours and Special Hours

May 31: Memorial Day (University closed)  
June 6: Commencement  
July 5: Independence Day Observed (University closed)

July 6 through July 9 the Office of Enrollment Services/Continuing Studies will be open from 8:30 am-5:00 pm.

The week of August 23 through August 27, the Office of Enrollment Services/Continuing Studies will be open from 8:30 am-7:00 pm.

#### Phone Directory

Bookstore — UML North.....(978) 934-2623  
Bookstore — UML South .....(978) 934-6908  
Continuing Studies:  
Main Number.....(978) 934-2480  
Fax Number.....(978) 934-3087  
Advising Center.....(978) 934-2474  
Enrollment Services.....(978) 934-2480  
Graduate School.....(978) 934-2380  
(800) 656-GRAD  
College of Education.....(978) 934-4600  
Library — UML North  
(Alumni/Lydon).....(978) 934-3205  
Library — UML South  
(O'Leary).....(978) 934-4550  
Phone-In Registration —  
Operator-Assisted.....(978) 934-2700  
Phone-In Registration —  
Automated.....(978) 934-2050/2049  
UMass Lowell Main Number.....(978) 934-4000  
UMass Lowell Directions.....(978) 934-5800  
UMass Online Directions.....www.uml.edu/maps  
Weather Cancellations.....(978) 934-2121

See our Website at <http://continuinged.uml.edu>

You can also visit the Graduate School Website at [www.uml.edu/grad/off\\_campus](http://www.uml.edu/grad/off_campus)

See Academic Calendars on page 18 for appropriate registration deadlines.

#### Mail-In Registration

- Fill out the registration form and return it postmarked no later than the scheduled deadline.
- Mail to: University of Massachusetts Lowell  
Enrollment Services/Continuing Studies,  
Corporate and Distance Education  
One University Avenue  
Lowell, MA 01854-2881
- Payment must be made with the registration form, either by check, money order, VISA, MasterCard, or Discover. Make checks payable to: University of Massachusetts Lowell.
- Students will receive class confirmation, room assignment, receipt and ID by mail before the first class meeting.
- If your class has not been assigned a classroom when you register, please visit our Website at <http://continuinged.uml.edu> and click on "View your schedule and classrooms."

#### Fax-In Registration

Fill out the registration form and fax it to (978) 934-3087 no later than the scheduled deadline. Be sure to include your VISA, MasterCard, or Discover number.

#### Phone-In Registration with an Operator

- Payment can be made by VISA, MasterCard, or Discover only.
- Call (978) 934-2700. Please refer to the Office of Enrollment Services/Continuing Studies hours for phone-in registration times. The registration staff may take only registration information. If you have any questions concerning courses and academic programs, please call (978) 934-2480 or (978) 934-2474 or see our website at [continuinged.uml.edu](http://continuinged.uml.edu).

#### Automated Phone-In Registration Using the Voice Response System (Credit Courses Only)

Students who are presently enrolled at the University of Massachusetts Lowell, Continuing Studies and Corporate Education and who have a Continuing Studies PIN# (students registered during Fall and Spring), may now register for summer classes through the touchtone telephone registration system. This system is available during the following times: Monday-Thursday: 6:00 am-11:00 pm; Friday: 6:00 am-9:00 pm. **Note: Students will not receive a written receipt when registering using the Voice Response System.**

To Access the System, Dial (978) 934-2049 or (978) 934-2050.

The Voice Response System will answer the call and ask if you want to access Day School (Option 1) or Evening Division (Option 3). Choose Option 3. You will now be asked for your ID # and, if valid, your Continuing Studies PIN#.

Hold flags will be checked and, if none are found, you will be led through the Registration/Add/Drop process by a series of menus and options.

When you finish selecting your courses, you will be asked to pay by credit card and informed of the amount owed. Registration will be completed upon payment.

If you hang up anytime during the call or do not complete the payment process, all of the ADD transactions will be undone.

If you experience any problems with this system, please report them to Enrollment Services at (978) 934-2588.

#### Walk-In Registration at the Office of Enrollment Services/Continuing Studies, Southwick Hall, Room 223, UML North

Please refer to the Office of Enrollment Services/Continuing Studies hours for walk-in registration. Payment must be made at the time of registration. Payment after 4:00 pm must be made by check, money order, VISA, MasterCard, or Discover. Students will receive class confirmation, room assignment, receipt, and ID at the time they register.

#### General Registration and Open House: Tuesday, May 11 5:00-7:30 pm

We will be holding a special Open House on Tuesday, May 11 from 5:00-7:30 pm in Southwick Hall/Enrollment Services. Program Coordinators and Advisors will be present to answer your questions. Registration will be available. For further information, please call the Advising Center at (978) 934-2474.

#### Late Registration — See page 18 for late registration dates

Note: There is an additional non-refundable \$50.00 fee for late registration. This fee will be added automatically to any account that has not been paid in full. No exceptions.

#### Final Drop/Add Period

See the academic calendar for appropriate drop/add dates. Drop/adds can be processed in the Office of Enrollment Services/Continuing Studies, Southwick Hall 223, UML North.

#### Last Week to Withdraw with "W" Notation

See the appropriate academic calendar for the last day to withdraw. Students withdrawing from any class must officially notify the Office of Enrollment Services in writing, in person, by fax (978-934-3087) or by mail postmarked no later than the scheduled deadline. Verbal messages to faculty or staff do not constitute official notification.

#### Identification Card

Students registering in person will receive an ID card during the office walk-in registration and general registration. Students who register by phone or mail will receive their ID by return mail with their letter of confirmation and receipt.



## Institutional Disclosure

Institutional Disclosure of Information according to the Higher Education Act is available at [www.uml.edu/student-services](http://www.uml.edu/student-services).

## Students with Disabilities

A student with a disability who needs special arrangements should contact Kerry Donohoe at the Advising Center at (978) 934-2465 early in the registration process. Special advising, registration assistance, preferential scheduling, and alternative examination procedures are available. Students must qualify for handicapped parking stickers. Special parking is also available on a temporary basis.

## The University's Annual Campus Crime and Safety Report

The University's Annual Campus Crime and Safety Report, which includes campus crime statistics and information about campus alcohol, drug and sexual assault policies as well as other important matters, is available on the Web at <http://www.uml.edu/police>. Paper copies of this report are available upon request at University Police (Ball Hall — 978-934-2384) and at the Office of Student Services (Cumnock Hall — 978-934-2100).

## Correct Social Security Number/Tax Identification Number

The University of Massachusetts Lowell must obtain your correct social security number (SSN) to file certain information returns with the IRS as well as to furnish a statement to you. The returns the University must file contain information about qualified tuition and related expenses (Form 1098-T, Tuition Payments Statement). The information about your tuition will help to determine whether you, or the person who can claim you as a dependent, may take the Hope credit or Lifetime Learning credit to reduce the federal income tax.

## Bookstore Locations

UML North — Falmouth First Floor, (978) 934-2623  
UML South — UML South Dining Hall, (978) 934-6908  
Please call the Bookstore to confirm the location of your textbook.

# Financial Information

Tuition is priced on the listed credit hour unless the contact hour is different. Tuition is then based on the listed contact hour. See information on Financial Aid, TERI Loans, and Scholarships on our website at <http://continuinged.uml.edu>.

Tuition and Fee Information	Per Credit/Contact Hr.
Undergraduate Tuition	\$245.00
Undergraduate Audit	\$245.00
Undergraduate High Tech and Specialized Courses (Undergraduate courses offered on campus listed under Computer Science, Information Technology and Art/Graphics)	\$245.00
Undergraduate High Tech and Specialized Courses Audit	\$245.00
Undergraduate Off-Campus Courses/Audit*	\$245.00 to \$295.00
Undergraduate Online Courses	\$270.00
Undergraduate Online Courses Audit	\$270.00
Graduate Online Professional Courses and Audit	\$410.00
Graduate On-Campus and Off-Campus Courses and Audit*	\$410.00
Late Registration Fee (non-refundable)	\$50.00

\*Note: Some tuitions may vary depending on customization and customer and program requirements.

Students who have checks returned due to insufficient funds will be charged an additional \$30.00 for the processing of the registration.

## Overdue Accounts

Students will be permitted to attend class and to utilize facilities only after they have cleared all their financial obligations to the University. In addition, student transcripts and diplomas will not be released until all debts have been paid. Should it be necessary to utilize the services of a collection agency or attorney for an overdue student account, the student will be liable for any and all legal fees, commissions, and associated service charges.

## Directed Studies

Directed Studies and Practicums are considered Special Programs, and as such, tuition remission and certificates of eligibility cannot be accepted.

## NOTE: Veterans' Information

Veterans must be matriculated in an undergraduate degree program and have all appropriate paperwork on file in the Office of Enrollment Services/Continuing Studies, including a DD214, an Admission Application form, and official transcripts from other colleges in order to receive VA benefits. Tuition waivers are available to veterans who are legal residents of Massachusetts for more than 12 consecutive months, and Proof of Residency must be updated annually. These waivers for legal Massachusetts residents are not retroactive and do not cover registration and other fees. Veterans requesting benefits must check the appropriate line on the registration form. Veterans should use the mail-in or walk-in options when registering and should provide all necessary documentation (no phone-in). For additional information, please see our Website at <http://continuinged.uml.edu> or call Linda Morabito at (978) 934-2461.

Veterans' waivers are available for on-campus courses provided there is a sufficient number of tuition-paying students enrolled to bear the cost of instruction and provided there is space available. Due to the high cost of online and off-campus courses, there are no waivers available for these courses. There are no waivers for Directed Studies, Practicums, and Internships. Merit and Need-Based Assistance Grants for online courses may be available to veterans who are presently enrolled in degree and certificate programs and who are making satisfactory academic progress towards their degrees or certificates.

## International Students

International students registering for classes or enrolling in programs must provide proof of Visa status upon registration. F-1 and J-1 students living in the United States will be allowed to count, per semester, only one distance learning (online) course, or 3 credits, toward the full-time undergraduate course load (12 hours) or the full-time graduate course load (9 hours). The ultimate responsibility to know and follow the USCIS rules rests upon the students themselves. Students on B-1, B-2, or F-2 visas may not register for any academic classes. Please call (978) 934-2588 if you have any questions.

## Third-Party Payment

All students using company direct payment, military plans, state tuition waivers, or veterans' waivers must include the appropriate forms or authorizing letters with their registration, or have them on file. No tuition refund is awarded for late submission of eligibility form. Students receiving company reimbursement must prepay their own tuition. For additional information, call (978) 934-2479.

## NOTE:

### Senior Citizens

Senior citizens (60 years or older) who are Massachusetts residents may attend classes in Continuing Studies credit programs tuition-free provided that there is a sufficient number of tuition-paying students enrolled to bear the cost of instruction and provided there is space available. Please note that waivers are not retroactive and do not cover fees. Proof of Massachusetts residency and birth date must be provided annually at the time of registration. There are no waivers available for online and off-campus courses. In addition there are no waivers for Directed Studies, Practicums, and Internships. Merit and Assistance Grants are available for veterans and seniors taking online courses who are presently enrolled in Degree and Certificate Programs and are making satisfactory academic progress towards their degrees or certificates.

# Academic Calendar & Registration Information



## May 24–June 30 Summer Session I

Day classes begin on Monday, May 24.

M/W Evening classes begin on Monday, May 24 and include 2 FRIDAYS: June 4 and June 18 at the regularly scheduled hours.

T/Th Evening classes begin on Tuesday, May 25 and include 2 FRIDAYS: June 11 and June 25 at the regularly scheduled hours.

Online classes begin Monday, May 24.

We encourage you to mail-in, phone-in, or fax your registration.

May 31: Memorial Day observed

Mail-In Registration: April 5 to May 14  
Phone-In Registration: April 5 to May 14  
Fax-In Registration: April 5 to May 14  
Walk-In Registration: April 5 to May 14

General Registration and Open House: Tuesday, May 11

Late Registration: Begins Tuesday, May 18  
There is an additional non-refundable \$50.00 fee for late registration.

Last Day to Add a Lab

Day Classes: May 25

Last Day for Partial Refund

(Before the 3rd class meeting)

Day Classes: May 26  
M/W Evening Classes: June 2  
T/Th Evening Classes: June 1  
Online Classes: Through June 1

Last Day to Add Course

Day Classes: May 25 without permission;  
May 26 with instructor permission  
M/W Evening Classes: May 26 without permission;  
June 2 with instructor permission  
T/Th Evening Classes: May 27 without permission;  
June 1 with permission  
Online Classes: Through May 28

Last Day to Drop Course

Day Classes: May 26  
M/W Evening Classes: June 2  
T/Th Evening Classes: June 6  
Online Classes: June 8

Last Day to Withdraw with "W" Notation

Day Classes: June 5 for 3-credit courses,  
June 6 for 4-credit courses  
M/W Evening Classes: June 21  
(Before the 10th class meeting)  
T/Th Evening Classes: June 22  
(Before the 10th class meeting)  
Online Classes: June 26 for courses ending July 16;  
July 24 for courses ending August 19

Final Examinations

Day Classes: June 29 for 3-credit courses,  
June 30 for 4-credit courses  
M/W Evening Classes: Wednesday, June 30  
T/Th Evening Classes: Tuesday, June 29

NOTE: M/W evening courses meet twice a week plus 2 Fridays: June 4 and June 18. T/Th evening courses meet twice a week plus 2 Fridays: June 11 and June 25.

## July 12–August 19 Summer Session II

Day Classes begin on July 12.

M/W Evening classes begin on July 12 and include 2 FRIDAYS: July 23 and August 6 at the regularly scheduled hours.

T/Th Evening classes begin on July 13 and include 2 FRIDAYS: July 30 and August 13 at the regularly scheduled hours.

We encourage you to mail-in, phone-in, or fax your registration to guarantee the class of your choice and the receipt of your classroom confirmation.

July 5: Independence Day observed

Mail-In Registration: April 5 to July 1  
Phone-In Registration: April 5 to July 1  
Fax-In Registration: April 5 to July 1  
Walk-In Registration: April 5 to July 1

Late Registration: Begins July 2  
There is an additional non-refundable \$50.00 fee for late registration.

Last Day to Add a Lab

Day Classes: July 13

Last Day for Partial Refund

(Before the 3rd class meeting)

Day Classes: July 14  
M/W Evening Classes: July 19  
T/Th Evening Classes: July 20

Last Day to Add Course

Day Classes: July 13 without permission;  
July 14 with instructor permission  
M/W Evening Classes: July 14 without permission;  
July 19 with instructor permission  
T/Th Evening Classes: July 15 without permission;  
July 20 with permission

Last Day to Drop Course

Day Classes: July 14  
M/W Evening Classes: July 19  
T/Th Evening Classes: July 20

Last Day to Withdraw with "W" Notation

Day Classes: August 6 for 3-credit courses,  
July 25 for 4-credit courses  
M/W Evening Classes: August 6  
(Before the 10th class meeting)  
T/Th Evening Classes: August 10  
(Before the 10th class meeting)  
Online Classes: Through July 24

Final Examinations

Day Classes: August 17 for 3-credit courses,  
August 18 for 4-credit courses  
M/W Evening Classes: Wednesday, August 18  
T/Th Evening Classes: Thursday, August 19

NOTE: M/W evening courses meet twice a week plus 2 Fridays: July 23 and August 6. T/Th evening courses meet twice a week plus 2 Fridays: July 30 and August 13.



**Tuition Refund Policy for Credit Courses**

Any eligibility for tuition refund is based on the academic calendar, not class attendance, and is pro-rated as follows, excluding fees:

**Summer I and Courses spanning Summer I and II**

Drop on or before May 14	100%
Drop from May 15 to before the first class meeting	90%
Before the second class meeting	80%
Before the third class meeting	40%
After third class meeting	No refund

**Summer II**

Drop on or before July 2	100%
Drop from July 3 to before the first class meeting	90%
Before the second class meeting	80%
Before the third class meeting	40%
After third class meeting	No refund

**Tuition Refund Policy for Online Courses (Graduate and Undergraduate)**

Drop on or before May 14	100%
Drop from May 15 to May 21	90%
Drop from May 22 to May 28	80%
Drop from May 29 to June 1	40%
Drop after June 2	No refund

Tuition will be refunded if Continuing Studies is responsible for cancellations. The refund process normally requires at least a period of four to six weeks from the beginning of the semester.

Students withdrawing from any class must officially notify the Office of Enrollment Services/Continuing Studies on forms provided by the Office. Verbal messages to faculty or staff do not constitute official notification.

**Tuition Refund Policy for Students Receiving Title IV Financial Aid and Who Are Enrolled in a Degree or Specifically Designated Certificate Program**

Refunds for Title IV financial aid recipients will be processed according to Federal guidelines and institutional policy. Please call the Financial Aid Office at (978) 934-4220 if you have any questions.

**Student Health Insurance**

Every student who is enrolled in at least 9 semester hours or more in a degree program is required by Massachusetts state legislation to participate in a qualifying student health insurance program. The cost of this insurance is \$435 from January 1 until August 14 and \$183 from May 20 until August 14. Payment of the appropriate fee will be required at registration. To waive participation in this program, students must fill out a form at registration showing equivalent coverage. The name of your insurance company and your policy number are required information on the waiver form.

**International Students**

All International students are required to be enrolled in the University Student Health Insurance Plan. This requirement is authorized under the insurance laws for higher education students in Massachusetts (Section 275 of Chapter 151 of the Acts of 1996). The only exception to this requirement will be for International students covered through an embassy plan. Students so insured will be permitted to waive the school plan, providing they submit official documentation that confirms they have such coverage and that this coverage meets the state requirements. Documentation of student status must be provided. Please call Maureen Secchiaroli at 978-934-2489.

**Financial Aid**

For information regarding Financial Aid, please contact Thu-Ha Pham in the Financial Aid Office at (978) 934-4222. See information on Financial Aid, TERI Loans and Scholarships on our website at <http://continuinged.uml.edu>.

# Academic Information

The University of Massachusetts Lowell is accredited by the New England Association of Schools and Colleges, which accredits schools and colleges in the six New England states. Membership in the Association indicates that the institution has been evaluated carefully and meets the standards agreed upon by qualified educators. The programs in Civil Engineering Technology, Electronic Engineering Technology, and Mechanical Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology. The Bachelor of Science in Business Administration (BSBA) is accredited by the AACSB — The International Association for Management Education.

**Catalog**

Students should refer to the Continuing Studies, Corporate and Distance Education catalog for rules, regulations, program outlines, and course descriptions. The catalog is available in the Advising Center and the Office of Enrollment Services/Continuing Studies and at <http://continuinged.uml.edu>.

**Admission into a Certificate or Degree Program**

Students who have graduated from high school or who have earned a high school equivalency certificate are invited to apply for programs leading to a Certificate or an Associate's or Bachelor's degree. Applications for all programs are accepted on a rolling admissions basis. Contact the

Continuing Studies, Corporate and Distance Education/Advising Center at (978) 934-2474 (certificate and degree programs) for an application and information on the application procedure. There is no fee to apply.

For a listing of our degree and certificate programs, please see page 8.

A student enrolled in any of our degree or certificate programs should schedule an appointment with the appropriate program advisor to help plan a schedule for degree or certificate completion.

**Admission into a Graduate Certificate or Degree Program**

Students interested in applying into Graduate degree or certificate programs should contact the Graduate School at (800) 656-GRAD or [www.uml.edu/grad](http://www.uml.edu/grad). Students with Bachelor's degrees from accredited institutions are eligible to enroll as non-degree students for a total of 12 credits prior to matriculating into formal Graduate degree programs. Students must formally apply to Graduate certificate programs before enrolling in Graduate courses intended for specific certificate programs.

**Undergraduate Degree Completion**

Students who expect to complete their degree requirements in the 2003-2004 academic year must arrange for a graduation interview at the Advising Center (978-934-2474). Students who anticipate graduating at the end of the Spring semester must complete the interview process by April 16. Students who anticipate graduating at the end of the Summer sessions must complete the interview process by June 18. A fee of \$75.00 is required of graduating students. Commencement will be held on June 6, 2004.

**Undergraduate Certificate Completion**

When a student completes the necessary courses for a certificate program, the student should complete and submit a Certificate Award Petition to Continuing Studies/Advising Center.

**Course Grades**

Grade reports for the Summer sessions will be mailed to students approximately two weeks after exams end. Students who have received their PIN# can also call the Voice Response System at (978) 934-2049 or (978) 934-2050 to receive their Summer grades, which will be available as soon as they are posted.

# Advising Information

Advising Center Students are welcome to drop by the Advising Center, located in Southwick Hall, Room 225, from 8:30 am to 5:00 pm for general advising, information on Associate's and Bachelor's degrees and certificate programs, and/or to obtain catalogs and brochures. Call (978) 934-2474 for information or email at [Continuing\\_Education@uml.edu](mailto:Continuing_Education@uml.edu). For questions on Graduate programs, call the Graduate School at (978) 934-2380 or (800) 656-GRAD or see the website at [www.uml.edu/grad](http://www.uml.edu/grad).

**Appointments with Program Coordinators and General Advisors**

In addition to the general advising conducted at the Advising Center, appointments with General Advisors and Program Coordinators also can be scheduled. Evening supervisors are also available in Enrollment Services, Southwick Hall, Room 223, from 5:00-8:00 pm to answer questions and conduct status reviews. Students are encouraged to call the Advising Center at (978) 934-2474 to schedule an appointment.

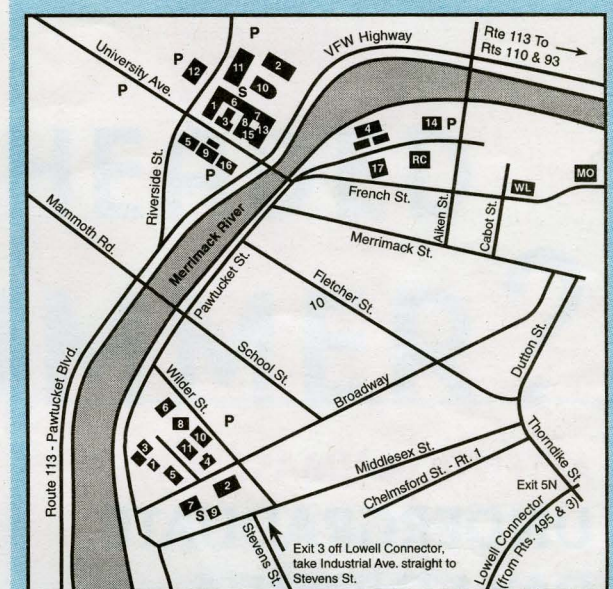
**Evening Supervisors**

Professor Alan Doerr  
Professor Bernard Shapiro

**Faculty Advisors**

Accounting and Management: Charles Thompson, Associate Professor  
Biology, Chemistry, Environmental Science, Physics: Paul Damour, Associate Professor  
Civil Engineering Technology: Nihar Mohanty  
Computer Mathematics, Information Technology: Ann Marie Hurley, Professor  
Liberal Arts, Criminal Justice, Paralegal Studies: Joseph Lipchitz, Professor  
Electronic Engineering Technology: Fahd Wakim, Professor  
Electronic Engineering Technology: Amanda Davis, Assistant Professor  
Mathematics: Alan Doerr, Professor  
Mechanical Engineering Technology: Robert Tuholski, Professor, Engineering Technology Department Head  
Mechanical Engineering Technology: Glenn Sundberg, Assistant Professor  
Plastics Engineering Technology: Stephen Driscoll, Professor

# Campus Information

**North**

- 1 BL Ball Engineering Ctr.
- 2 Costello Gym
- 3 Cumnock Hall
- 4 Dormitories
- 5 Eames Hall
- 6 EB Engineering
- 7 FA Falmouth
- 8 KI Kitson
- 9 LL Alumni/Lydon Library
- 10 EC Pinanski
- 11 OH Olney
- 12 OS Olsen
- 13 PA Pasteur
- 14 Research Foundation
- 15 SO Southwick Hall
- 16 Smith Hall
- 17 Fox Student Union
- P Parking
- S Security

**South**

- 1 Allen Hall
- 2 CO Coburn
- 3 Concordia Hall
- 4 Dining Hall
- 5 DU Dugan Hall
- 6 DR Durgin Hall
- 7 MA Mahoney Hall
- 8 OL O'Leary Library
- 9 Power Plant
- 10 SU Student Union
- 11 WE Weed Hall
- P Parking
- S Security

**Downtown**

- MO Mogan Center
- WL Wannalancit

**Directions**

**Due to the temporary closure of the University Avenue Bridge in Lowell, directions for driving to UMass Lowell may have changed. Please visit our website for details.**

For UMass Lowell online directions, go to [www.uml.edu/maps](http://www.uml.edu/maps). For UMass Lowell directions, call (978) 934-5800.

**Parking**

New parking stickers are required for all Continuing Studies students. These stickers are available at the University Police Parking Bureau. Call the Parking Bureau at (978) 934-4211 for hours of operation. The Parking Registration Form also is available at [www.uml.edu/parking.html](http://www.uml.edu/parking.html).

This sticker entitles students to park after 5:30 pm in a University parking lot except Cumnock Hall. Students are encouraged to park in the numerous parking lots on the UML North and UML South campus. **Students and faculty should not compromise public safety by blocking access of fire lanes, ambulance and other emergency vehicles.** Students and faculty should not park in handicap spaces unless they display a handicap sticker. Student and faculty cars will be towed and/or ticketed for violations. In addition, the Lowell Police will tow student and faculty cars if cars are parked in "Residential Parking" areas. Remember to bring your car registration and a photo ID when you come in to get a parking sticker.

Please call the Advising Center at (978) 934-2474 for the locations of parking lots available for use by Continuing Studies students who visit the campus during the day.

**Locating Your Classroom**

Upon registration, students are issued a confirmation printout, which includes the two-letter building code along with the room number. Refer to the map and building key above to locate where your class will be held. For assistance, call the Advising Center at (978) 934-2474. If your class has not been assigned a classroom when you register, please visit our Website at <http://continuinged.uml.edu> and click on "View your schedule and classrooms."

**University Escort Service**

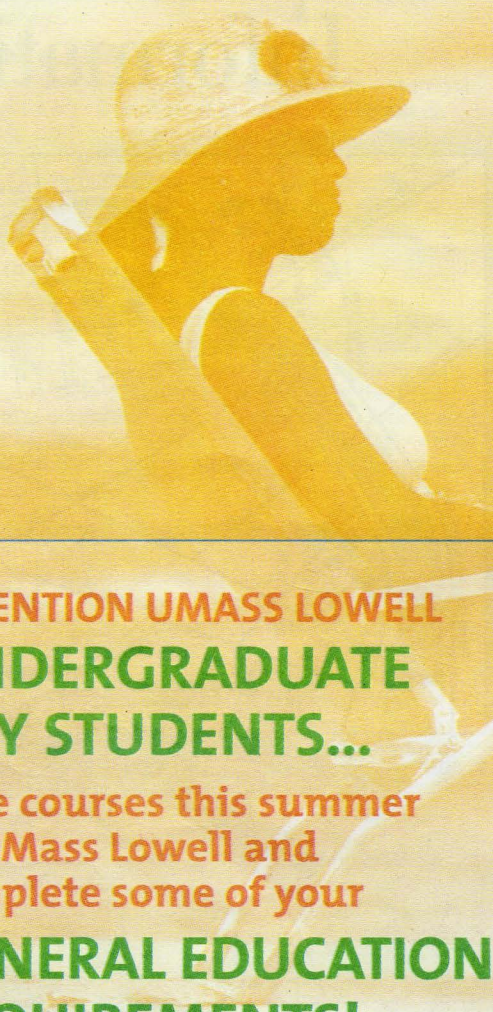
The University now operates a motorized escort service seven nights a week from 6:00 pm to 1:00 am. Call Ext. 2222 for a ride anywhere on campus — from the parking lots, to the library, the residence hall, or the gym. It is a service designed for the entire University community day and evening students, staff, and faculty.

This newspaper is printed at no cost to the Commonwealth of Massachusetts. The University of Massachusetts Lowell is an Equal Opportunity/Affirmative Action University and does not discriminate in employment or access to programs or services on the basis of race, sex, sexual orientation, color, national origin, religion, handicap, or veteran's status and is in compliance with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, and the Americans With Disabilities Act, 1990. Any inquiries and/or grievances may be referred to the Affirmative Action Officer, the Title IX Coordinator, the Disabilities Coordinator and/or to the Director, Office for Civil Rights, U.S. Department of Health and Human Services, Washington, D.C.

Every effort has been made to ensure the accuracy of the information presented in this bulletin. However, Continuing Studies and Corporate Education (CSCE) reserves the right to implement new rules and regulations and to make changes of any nature in its program, calendar, procedures and standards, degree requirements, and academic schedules (including, without limitations, changes in course content and class schedules), locations, tuition, and fees. Whenever possible, appropriate notice of such changes will be given before they become effective. When changes are necessary, Continuing Studies exerts reasonable efforts to provide comparable or substantially equivalent instructional services and facilities for those originally designated. However, CSCE assumes no liability for failure to deliver or for delay in delivering such services (including those in support of academic functions or student life) when the causes for such failure or delay are beyond the reasonable control of Continuing Studies — which causes include, without limitation, the following: power failure, fire, accident, natural disaster, work slowdown and strikes, loss of personnel, and acts of public authorities. In registering for courses, each student assumes full responsibility for knowledge of and compliance with the definitions, regulations, and procedures for the University as set forth in the appropriate publications and bulletins.



# HOME FOR THE SUMMER?



*Calling All College Students:*

**TAKE A COURSE THIS SUMMER AT UMASS LOWELL  
AND COUNT IT TOWARDS YOUR DEGREE AT A  
NUMBER OF OTHER ACCREDITED COLLEGES  
AND UNIVERSITIES.**

**IF YOU STUDY AT ANOTHER COLLEGE OR UNIVERSITY,** you may be able to take a UMass Lowell course this Summer and transfer it into your program of study at another institution. We offer a wide selection of on campus and online courses, many of which can be used to fulfill degree requirements at other institutions of higher education. Take a look at the courses we're offering this summer... if any of them are comparable to the credit courses required at your institution, you may be able to take them at UMass Lowell this summer and transfer them into your program of study.\*

**Summer courses begin May 24, 2004**

**Summer I: May 24—June 30**

**Summer II: July 12—August 19**

**Online Courses: May 24—August 19**

## **ATTENTION UMASS LOWELL UNDERGRADUATE DAY STUDENTS...**

**Take courses this summer  
at UMass Lowell and  
complete some of your**

## **GENERAL EDUCATION REQUIREMENTS!**

A large selection of "Gen Ed 2000" courses will be offered this summer, plus a wide variety of other courses that can be counted as free electives!

For more information and a complete list of the Gen Ed courses that will be offered this summer, check out <http://continuinged.uml.edu/summerschool> or call the Advising Center at (978)-934-2474 for a Summer 2004 Gen Ed flyer.

For additional information on the University's General Education Requirements, please visit <http://www.uml.edu/gened>

**To speak with one of our advisors about taking a course at UMass Lowell and counting it towards your degree at another college or university, call (978) 934-2474.**

**\*Please Note: Individual schools and colleges have specific policies regarding transfer requirements. Students should check with their originating college or university regarding acceptance of transfer credits from other institutions of higher education.**

*UMass Lowell Summer Courses — Bringing You One Step Closer to Your Degree!*

## **REGISTRATION FORM FOR CREDIT/NONCREDIT COURSES**

**Note: Please remember to fill in your work, home phone numbers and email address. This will allow us to reach you in case of class cancellations.**

### **University of Massachusetts Lowell**

Continuing Studies and Corporate Education (978) 934-2480  
One University Avenue, Lowell, MA 01854

**PLEASE USE INK AND PRINT**

#### **CHECK APPROPRIATE REGISTRATION STATUS:**

- ☐ Summer I (May 24—June 30)      ☐ Summer II (July 12—August 19)  
☐ Undergraduate Credit      ☐ Graduate      ☐ Non-Credit

Citizenship: ☐ United States    ☐ Other

International Students + Visa (Please attach copies of your Visa)

Social Security No. \_\_\_\_\_ Tax ID No. \_\_\_\_\_

Name \_\_\_\_\_

Street & No. \_\_\_\_\_

City & State \_\_\_\_\_ Zip Code \_\_\_\_\_

Date \_\_\_\_\_

Sex ☐ M ☐ F Date of Birth \_\_\_\_\_

Work Phone \_\_\_\_\_

Home Phone \_\_\_\_\_

Email \_\_\_\_\_

Company Name \_\_\_\_\_

Street Address \_\_\_\_\_

City & State \_\_\_\_\_

Change of name or address since last registration? ☐ yes ☐ no

Former name \_\_\_\_\_

Will you be using veteran benefits? ☐ yes ☐ no

State/Active Duty \_\_\_\_\_ G.I. Bill \_\_\_\_\_

COURSES FOR WHICH YOU ARE REGISTERING											
Course Number					Course Title					Credits/Non-Credit	
					SUMMER I						
					SUMMER II						

#### **COMPLETE IF PAYING BY CREDIT CARD**

☐ MasterCard    ☐ VISA    ☐ Discover    Account Number \_\_\_\_\_

Expiration Date \_\_\_\_\_ Customer Signature \_\_\_\_\_

#### **Tuition and Fees**

##### **Tuition**

##### **Late Fee**

(Save \$50 Late Fee -  
Register Early)

**Total**    \$    .